

BOBBY JINDAL  
GOVERNOR



HAROLD LEGGETT, PH.D.  
SECRETARY

State of Louisiana  
DEPARTMENT OF ENVIRONMENTAL QUALITY  
ENVIRONMENTAL SERVICES

MAY 30 2008

CERTIFIED MAIL 7008 0150 0003 4519 4797 -RETURN RECEIPT REQUEST

File No.: LA0005754  
AI No.: 1136  
Activity No.: PER20060017

Ms. Anne Adrien, Senior Environmental Engineer  
Shell Chemical LP  
Geismar Plant  
7594 Highway 75  
Geismar, Louisiana 70734

RE: Draft Louisiana Pollutant Discharge Elimination System (LPDES) permit to discharge treated process wastewaters, cooling tower blowdown, once-through non-contact cooling water, miscellaneous utility wastewaters, process area stormwater runoff to the Mississippi River, and non-process area stormwater, utility water and hydrostatic test water to Smith Bayou from an existing organic chemical manufacturing facility located at 7594 Highway 75, Geismar, Ascension Parish.

Dear Ms. Adrien:

The Department of Environmental Quality proposes to reissue an LPDES permit with the effluent limitations, monitoring requirements, and special conditions listed in the attached DRAFT PERMIT. Please note that this is a DRAFT PERMIT only and as such does not grant any authorization to discharge. Authorization to discharge in accordance with this permitting action will only be granted after all requirements described herein are satisfied and by the subsequent issuance of a FINAL PERMIT. Upon the effective date of the FINAL PERMIT, the FINAL PERMIT shall replace the previously effective LPDES permit.

This Office will publish a public notice one time in a local newspaper of general circulation and the Department of Environmental Quality Public Notice Mailing List. A copy of the public notice containing the specific requirements for commenting to this draft permit action will be sent under separate cover at the time the public notice is arranged. In accordance with LAC 33:IX.6521.A, the applicant shall receive and is responsible for paying the invoice(s) from the newspaper(s). LAC 33:IX.6521 states: "...the costs of publication shall be borne by the applicant."

The invoice, fee rating sheets, and a copy of the fee regulations will be sent under a separate cover letter as applicable. A copy of the entire Louisiana Water Quality Regulations may be obtained from the DEQ Office of Environmental Assessment, Post Office Box 4314, Baton Rouge, Louisiana 70821-4314, (225) 219-3236.

Shell Chemical LP  
LA0005754 / AI No. 1136  
Page 2

Pursuant to LAC 33:IX.1309.I, LAC 33:IX.6509.A.1 and LAC 33:I.1701, you must pay any outstanding fees to the Department. Therefore, you are encouraged to verify the facility's fee status by contacting LDEQ's Office of Management and Finance, Financial Services Division (225) 219-3863. Failure to pay in the manner and time prescribed could result in applicable enforcement actions as prescribed in the Environmental Quality Act, including, but not limited to revocation or suspension of the applicable permit, and/or assessment of a civil penalty against you.

To ensure that all correspondence regarding this facility is properly filed into the Department's Electronic Document Management System, you must reference your Agency Interest (AI) number 1136 and LPDES permit number LA0005754 on all future correspondence to this Department, including Discharge Monitoring Reports.

Should you have any questions concerning any part of the DRAFT PERMIT, public notice requirements, or fee, please feel free to contact Melanie Connor of the Office of Environmental Services at the address on the preceding page or by telephone at (225) 219-3088.

Sincerely,



Jesse Chang  
Environmental Scientist Manager  
Industrial Water Permits

MBC

Attachment(s) draft permit, factsheet, and fee sheet:

cc: Melanie Connor  
Water Permits Division

IO-W

ec: Public Participation Group (for public notice)  
Office of Environmental Assistance

Melissa Reboul (draft permit only)  
Water Permits Division

Gayle Denino  
Office of Management & Finance

Permit Compliance Unit  
Office of Environmental Compliance

Scott Guilliams  
Water Permits Division

**DRAFT**



**PERMIT NUMBER**

**LA00005754**

**AI No.: 1136**

**OFFICE OF ENVIRONMENTAL SERVICES**  
**Water Discharge Permit**

Pursuant to the Clean Water Act, as amended (33 U.S.C. 1251 et seq.), and the Louisiana Environmental Quality Act, as amended (La. R. S. 30:2001 et seq.), rules and regulations effective or promulgated under the authority of said Acts, and in reliance on statements and representations heretofore made in the application, a Louisiana Pollutant Discharge Elimination System permit is issued authorizing

Shell Chemical LP  
Geismar Plant  
7594 Highway 75  
Geismar, Louisiana 70734

**Type Facility:** Organic chemical manufacturing facility

**Location:** 7594 Highway 75, Geismar  
Ascension Parish

**Receiving Waters:** Mississippi River - Outfalls 001, 101, 201, 301, 401, 501, and 601 (070301) &  
Smith Bayou - Outfalls 002, 003, 004, 005, 006, 106, 007 (040404)

to discharge in accordance with effluent limitations, monitoring requirements, and other conditions set forth in Parts I, II, and III attached hereto.

This permit shall become effective on \_\_\_\_\_

This permit and the authorization to discharge shall expire five (5) years from the effective date of the permit.

**DRAFT**

Issued on \_\_\_\_\_

\_\_\_\_\_  
**Cheryl Sonnier Nolan**  
Assistant Secretary

## PART I

Page 2 of 14  
 Permit No. Draft LA0005754  
 AI No. 1136

## EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

During the period beginning the effective date and lasting through the expiration date the permittee is authorized to discharge from:

Outfall 001, the continuous discharge of combined wastestreams from previously monitored Outfalls 101, 201, 301, 401, 501 and 601

Such discharges shall be limited and monitored by the permittee as specified below:

<u>Effluent Characteristic</u>	<u>STORET Code</u>	<u>Discharge Limitations</u>				<u>Monitoring Requirements</u>	
		(lbs/day, UNLESS STATED)		Other Units (ug/L, UNLESS STATED)		Measurement Frequency	Sample Type
<u>CONVENTIONAL AND NONCONVENTIONAL</u>		Monthly Average	Daily Maximum	Monthly Average	Daily Maximum		
Flow-MGD	50050	Report	Report	---	----	Continuous	Recorder
pH Range Excursions (Continuous Monitoring), Number of Events > 60 Minutes	82581	---	0(*1)	---	---	Continuous	Recorder
pH Range Excursions (Continuous Monitoring), Monthly Total Accumulated Time in Minutes	82582	---	446(*1)	---	---	Continuous	Recorder
pH Minimum/Maximum Values (Standard Units)	00400	---	---	Report (Min)	Report (Max)	Continuous	Recorder
<u>WHOLE EFFLUENT (ACUTE) TOXICITY TESTING</u>	<u>STORET Code</u>	(Percent %, UNLESS STATED)				Measurement Frequency	Sample Type
				Monthly Avg Minimum	48-Hour Minimum		
NOEC, Pass/Fail [0/1], Lethality, Static Renewal, 48-Hour Acute, <u>Pimephales promelas</u>	TEM6C	---	---	Report	Report	1/quarter(*2)	24-hr. Composite
NOEC, Value [%], Lethality, Static Renewal, 48-Hour Acute, <u>Pimephales promelas</u>	TOM6C	---	---	Report	Report	1/quarter(*2)	24-hr. Composite
NOEC, Value [%], Coefficient of Variation, Static Renewal, 48-Hour Acute, <u>Pimephales promelas</u>	TQM6C	---	---	Report	Report	1/quarter(*2)	24-hr. Composite
NOEC, Pass/Fail [0/1], Lethality, Static Renewal, 48-Hour Acute, <u>Daphnia pulex</u>	TEM3D	---	---	Report	Report	1/quarter(*2)	24-hr. Composite

## PART I

Page 3 of 14  
Permit No. Draft LA0005754  
AI No. 1136

## EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS (Outfall 001 continued)

NOEC, Value [%], Lethality, Static Renewal, 48-Hour Acute, <u>Daphnia pulex</u>	TOM3D	---	---	Report	Report	1/quarter(*2)	24-hr. Composite
--	-------	-----	-----	--------	--------	---------------	------------------

NOEC, Value [%], Coefficient of Variation, Static Renewal, 48-Hour Acute, <u>Daphnia pulex</u>	TQM3D	---	---	Report	Report	1/quarter(*2)	24-hr. Composite
---	-------	-----	-----	--------	--------	---------------	------------------

There shall be no discharge of floating solids or visible foam in other than trace amounts.

Samples taken in compliance with the monitoring requirements specified above shall be taken at the following location(s):

Outfall 001, at the discharge line to the Mississippi River after commingling of all contributing wastestreams and prior to combining with the waters of the Mississippi River.

FOOTNOTE(S):

- (\*1) The pH shall be within the range of 6.0 - 9.0 standard units at all times subject to the continuous monitoring pH range excursion provisions at Part II.I.
- (\*2) See Part II.O.5.

## PART I

Page 4 of 14

Permit No. Draft LA0005754

AI No. 1136

## EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS (other requirements)

During the period beginning the effective date and lasting through the expiration date the permittee is authorized to discharge from:

Outfall 101, the continuous discharge of treated process wastewater, process area stormwater, tank farm area stormwater, cooling tower blowdown, sanitary wastewater, utility wastewaters, and intermittently discharged cooling tower blowdown from the K-2 Unit, hydrostatic test water, firewater system test water, laboratory wastewater and groundwater remediation wastewater

Such discharges shall be limited and monitored by the permittee as specified below:

Effluent Characteristic	STORET Code	Discharge Limitations				Monitoring Requirements (*1)	
		(lbs/day, UNLESS STATED)		Other Units (ug/L, UNLESS STATED)		Measurement Frequency	Sample Type
		Monthly Average	Daily Maximum	Monthly Average	Daily Maximum		
<u>CONVENTIONAL AND NONCONVENTIONAL</u>							
Flow-MGD	50050	Report	Report	---	---	1/day	Estimate
BOD <sub>5</sub>	00310	1581	4183	---	---	2/week	24-hr. Composite
TSS	00530	2299	7332	---	---	2/week	24-hr. Composite
<u>METALS AND CYANIDE(*2)</u>							
Total Zinc	01092	3.85	9.58	---	---	1/month	24-hr. Composite
<u>VOLATILE COMPOUNDS(*2)</u>							
Acrylonitrile	34215	4.42	11.14	---	---	1/year	24-hr. Composite
Benzene	34030	1.70	6.26	---	---	1/year	24-hr. Composite
Carbon Tetrachloride	32102	0.83	1.75	---	---	1/year	24-hr. Composite
Chlorobenzene	34301	0.69	1.29	---	---	1/year	24-hr. Composite
Chloroethane	34311	4.79	12.34	---	---	1/year	24-hr. Composite
Chloroform	32106	1.04	2.29	---	---	1/year	24-hr. Composite
1,1-Dichloroethane	34496	1.01	2.72	---	---	1/year	24-hr. Composite
1,2-Dichloroethane	34531	3.13	9.71	---	---	1/year	24-hr. Composite
1,1-Dichloroethylene	34501	0.74	1.15	---	---	1/year	24-hr. Composite
1,2-trans-Dichloroethylene	34546	0.97	2.49	---	---	1/year	24-hr. Composite
1,2-Dichloropropane	34541	7.04	10.59	---	---	1/year	24-hr. Composite
1,3-Dichloropropylene	51044	1.34	2.03	---	---	1/year	24-hr. Composite
Ethylbenzene	34371	1.47	4.97	---	---	1/year	24-hr. Composite
Methyl Chloride	34418	3.96	8.75	---	---	1/year	24-hr. Composite
Methylene Chloride	34423	1.84	4.10	---	---	1/year	24-hr. Composite
Tetrachloroethylene	34475	1.01	2.58	---	---	1/year	24-hr. Composite
Toluene	34010	1.20	3.68	---	---	1/year	24-hr. Composite
1,1,1-Trichloroethane	34506	0.97	2.49	---	---	1/year	24-hr. Composite
1,1,2-Trichloroethane	34511	0.97	2.49	---	---	1/year	24-hr. Composite
Trichloroethylene	39180	0.97	2.49	---	---	1/year	24-hr. Composite
Vinyl Chloride	39175	4.79	12.34	---	---	1/year	24-hr. Composite

## PART I

Page 5 of 14

Permit No. Draft LA0005754

AI No. 1136

## EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS (Outfall 101 continued)

Effluent Characteristic	STORET Code	Discharge Limitations		Other Units		Monitoring Requirements	
		(lbs/day, UNLESS STATED)		(ug/L, UNLESS STATED)		Measurement Frequency	Sample Type
		Monthly Average	Daily Maximum	Monthly Average	Daily Maximum		
<u>ACID COMPOUNDS(*2)</u>							
2-Chlorophenol	34586	1.43	4.51	---	---	1/year	24-hr. Composite
2,4-Dichlorophenol	34601	1.80	5.16	---	---	1/year	24-hr. Composite
2,4-Dimethylphenol	34606	0.83	1.66	---	---	1/year	24-hr. Composite
4,6-Dinitro-o-Cresol	34657	3.59	12.75	---	---	1/year	24-hr. Composite
2,4-Dinitrophenol	34616	3.27	5.66	---	---	1/year	24-hr. Composite
2-Nitrophenol	34591	1.89	3.18	---	---	1/year	24-hr. Composite
4-Nitrophenol	34646	3.31	5.71	---	---	1/year	24-hr. Composite
Phenol	34694	0.69	1.20	---	---	1/year	Grab
<u>BASE NEUTRAL COMPOUNDS(*2)</u>							
Acenaphthene	34205	1.01	2.72	---	---	1/year	24-hr. Composite
Acenaphthylene	34200	1.01	2.72	---	---	1/year	24-hr. Composite
Anthracene	34220	1.01	2.72	---	---	1/year	24-hr. Composite
Benzo(a)anthracene	34526	1.01	2.72	---	---	1/year	24-hr. Composite
Benzo(a)pyrene	34247	1.06	2.81	---	---	1/year	24-hr. Composite
3,4-Benzofluoranthene	34230	1.06	2.81	---	---	1/year	24-hr. Composite
Benzo(k)fluoranthene	34242	1.01	2.72	---	---	1/year	24-hr. Composite
Bis(2-ethylhexyl) phthalate	39100	4.74	12.84	---	---	1/year	24-hr. Composite
Chrysene	34320	1.01	2.72	---	---	1/year	24-hr. Composite
1,2-Dichlorobenzene	34536	3.54	7.50	---	---	1/year	24-hr. Composite
1,3-Dichlorobenzene	34566	1.43	2.03	---	---	1/year	24-hr. Composite
1,4-Dichlorobenzene	34571	0.69	1.29	---	---	1/year	24-hr. Composite
Diethyl phthalate	34336	3.73	9.35	---	---	1/year	24-hr. Composite
Dimethyl phthalate	34341	0.87	2.16	---	---	1/year	24-hr. Composite
Di-n-butyl phthalate	39110	1.24	2.62	---	---	1/year	24-hr. Composite
2,4-Dinitrotoluene	34611	5.20	13.12	---	---	1/year	24-hr. Composite
2,6-Dinitrotoluene	34626	11.74	29.51	---	---	1/year	24-hr. Composite
Fluoranthene	34376	1.15	3.13	---	---	1/year	24-hr. Composite
Fluorene	34381	1.01	2.72	---	---	1/year	24-hr. Composite
Hexachlorobenzene	39700	0.49	1.18	---	---	1/year	24-hr. Composite
Hexachlorobutadiene	34391	0.92	2.26	---	---	1/year	24-hr. Composite
Hexachloroethane	34396	0.97	2.49	---	---	1/year	24-hr. Composite
Naphthalene	34696	1.01	2.72	---	---	1/year	24-hr. Composite
Nitrobenzene	34447	1.24	3.13	---	---	1/year	24-hr. Composite
Phenanthrene	34461	1.01	2.72	---	---	1/year	24-hr. Composite
Pyrene	34469	1.15	3.08	---	---	1/year	24-hr. Composite
1,2,4-Trichlorobenzene	34551	3.13	6.45	---	---	1/year	24-hr. Composite

Samples taken in compliance with the monitoring requirements specified above shall be taken at the following location(s):

Outfall 101, at the point of discharge from the effluent treatment facility prior to combining with Final Outfall 001.

FOOTNOTE():

(\*1) When discharging.

(\*2) See Part II.J.

## PART I

Page 6 of 14

Permit No. Draft LA0005754

AI No. 1136

## EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

During the period beginning the effective date and lasting through the expiration date the permittee is authorized to discharge from:

Outfall 201, the continuous discharge of clarifier underflow, clarifier overflow, boiler blowdown, deaerator overflow, and waste heat generator blowdown

Such discharges shall be limited and monitored by the permittee as specified below:

<u>Effluent Characteristic</u>	<u>STORET Code</u>	<u>Discharge Limitations</u>		<u>Other Units</u>		<u>Monitoring Requirements</u>	
		(lbs/day, UNLESS STATED)	(mg/L, UNLESS STATED)	(lbs/day, UNLESS STATED)	(mg/L, UNLESS STATED)		
		Monthly Average	Daily Maximum	Monthly Average	Daily Maximum	Measurement Frequency	Sample Type
Flow-MGD	50050	Report	Report	---	---	1/week	Estimate

COAGULANTS:

The quantity and types of all coagulants (clarifying agents) used in the intake raw river water treatment clarification system during the sampling month shall be recorded. Records of the quantity and type of coagulants used shall be retained for three (3) years following Part III.C.3. No DMR reporting shall be required.

Flow measurement taken in compliance with the monitoring requirements specified above shall be taken at the following location:

Outfall 201, sum of individual measurements taken at the following points of discharge: intake raw river water treatment clarification system underflow at the clarifiers prior to discharge into the river water return canal; boiler and waste heat generator blowdown and deaerator overflow at the V-U204 blowdown vessel, prior to combining with any other streams.



## PART I

Page 7 of 14

Permit No. Draft LA0005754

AI No. 1136

## EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS (continued)

During the period beginning the effective date and lasting through the expiration date the permittee is authorized to discharge from:

Outfall 301, the continuous discharge of utility wastewater consisting of once-through non-contact cooling water, softener regeneration backwash, deaerator overflow, and filter backwash.

Such discharges shall be limited and monitored by the permittee as specified below:

Effluent Characteristic	STORET Code	Discharge Limitations				Monitoring Requirements	
		(lbs/day, UNLESS STATED)		Other Units (mg/L, UNLESS STATED)		Measurement Frequency	Sample Type
		Monthly Average	Daily Maximum	Monthly Average	Daily Maximum		
Flow-MGD	50050	Report	Report	---	---	3/week	Estimate
TOC	00680	---	---	---	5(*1)	3/week	24-hr. Composite

Samples taken in compliance with the monitoring requirements specified above shall be taken at the following location(s):

Outfall 301, at the point of discharge of the plant - west once-through non-contact cooling water across zone A crossbox prior to combining with any other waste streams.

## FOOTNOTE(S):

- (\*1) The daily TOC concentration of the effluent less the daily TOC concentration of the raw river water intake shall not exceed 5 mg/l. Concurrent monitoring by 24-hour composite sampling of both intake and effluent is required. A net TOC concentration contribution calculated as a negative value due to analytical variability shall be reported as zero.

## PART I

Page 8 of 14

Permit No. Draft LA0005754

AI No. 1136

## EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS (continued)

During the period beginning the effective date and lasting through the expiration date the permittee is authorized to discharge from:

Outfall 401, the continuous discharge of utility wastewater consisting of once-through non-contact cooling water, boiler blowdown, deaerator overflow, cooling tower blowdown from EO-2.

Such discharges shall be limited and monitored by the permittee as specified below:

Effluent Characteristic	STORET Code	Discharge Limitations		Other Units		Monitoring Requirements	
		(lbs/day, UNLESS STATED)	(mg/L, UNLESS STATED)	(lbs/day, UNLESS STATED)	(mg/L, UNLESS STATED)		
		Monthly Average	Daily Maximum	Monthly Average	Daily Maximum	Measurement Frequency(*1)	Sample Type
Flow-MGD	50050	Report	Report	---	---	3/week	Estimate
TOC	00680	---	---	---	5(*1)	3/week	24-hr. Composite

Samples taken in compliance with the monitoring requirements specified above shall be taken at the following location(s):

Outfall 401, at the point of discharge of the plant - east once-through non-contact cooling water across zone B crossbox prior to combining with any other waste streams.

FOOTNOTE(S):

- (\*1) The daily TOC concentration of the effluent less the daily TOC concentration of the raw river water intake shall not exceed 5 mg/l. Concurrent monitoring by 24-hour composite sampling of both intake and effluent is required. A net TOC concentration contribution calculated as a negative value due to analytical variability shall be reported as zero.

## PART I

Page 9 of 14  
 Permit No. Draft LA0005754  
 AI No. 1136

## EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS (continued)

During the period beginning the effective date and lasting through the expiration date the permittee is authorized to discharge from:

Outfall 501, the continuous discharge of cooling tower blowdown from AO-3 and EO-3.

Such discharges shall be limited and monitored by the permittee as specified below:

Effluent Characteristic	STORET Code	Discharge Limitations				Monitoring Requirements	
		Other Units		(lbs/day, UNLESS STATED) (mg/L, UNLESS STATED)		Measurement Frequency	Sample Type
		Monthly Average	Daily Maximum	Monthly Average	Daily Maximum		
Flow-MGD	50050	Report	Report	---	---	1/week	Estimate
TOC	00680	---	---	---	5(*1)	1/week	Grab

Samples taken in compliance with the monitoring requirements specified above shall be taken at the following location(s):

Outfall 501, at the point of discharge of the AO-3 and EO-3 cooling towers. Samples shall be collected by flow-weighted composite.

## FOOTNOTE(S):

- (\*1) The daily TOC concentration of the effluent less the daily TOC concentration of the raw river water intake shall not exceed 5 mg/l. Concurrent monitoring by grab sampling of both intake and effluent is required. A net TOC concentration contribution calculated as a negative value due to analytical variability shall be reported as zero.

## PART I

Page 10 of 14  
 Permit No. Draft LA0005754  
 AI No. 1136

## EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS (continued)

During the period beginning the effective date and lasting through the expiration date the permittee is authorized to discharge from:

Outfall 601, the continuous discharge of congeneration blowdown.

Such discharges shall be limited and monitored by the permittee as specified below:

Effluent Characteristic	STORET Code	Discharge Limitations				Monitoring Requirements	
		(lbs/day, UNLESS STATED)		Other Units (mg/L, UNLESS STATED)		Measurement Frequency	Sample Type
		Monthly Average	Daily Maximum	Monthly Average	Daily Maximum		
Flow-MGD	50050	Report	Report	---	---	1/week	Estimate
TOC	00680	---	---	---	5(*1)	1/week	Grab

Samples taken in compliance with the monitoring requirements specified above shall be taken at the following location(s):

Outfall 601, at the point of discharge of the COGEN unit.

## FOOTNOTE(S):

- (\*1) The daily TOC concentration of the effluent less the daily TOC concentration of the raw river water intake shall not exceed 5 mg/l. Concurrent monitoring by grab sampling of both intake and effluent is required. A net TOC concentration contribution calculated as a negative value due to analytical variability shall be reported as zero.

PART 1

Page 11 of 14  
Permit No. Draft LA0005754  
AI No. 1136

# EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS (continued)

During the period beginning the effective date and lasting through the expiration date, the permittee is authorized to discharge from:

Outfall 002, the intermittent discharge of non-process area stormwater from the South Ditch

Outfall 003, the intermittent discharge of non-process area stormwater from the North Ditch

Outfall 004, the intermittent discharge of non-process area stormwater from the East Ditch and a de minimus amount of fire system test water which may contain cooling tower blowdown which was routed to the firewater pond.

Outfall 005, the intermittent discharge of non-process area stormwater from the Southeast Ditch and a de minimus amount of fire system test water which may contain cooling tower blowdown which was routed to the firewater pond.

Such discharges shall be limited and monitored by the permittee as specified below:

Effluent Characteristic	STORET Code	Discharge Limitations				Monitoring Requirements	
		Other Units				Measurement Frequency (*1)	Sample Type
		(lbs/day, UNLESS STATED)	(mg/L, UNLESS STATED)	Monthly Average	Daily Maximum		
Flow-MGD	50050	Report	Report	---	---	1/quarter	Estimate
TOC	00680	---	---	---	50	1/quarter	Grab
Oil & Grease	03582	---	---	---	15	1/quarter	Grab
pH Minimum/Maximum Values	00400	---	---	6.0 (*2)	9.0 (*2)	1/quarter	Grab
				(Min)	(Max)		

There shall be no discharge of floating solids or visible foam in other than trace amounts.

Samples taken in compliance with the monitoring requirements specified above shall be taken at the following locations:

Outfall 002, at the point of discharge just beyond the plant's southeast skimming basin and west of the Illinois Central Railroad tracks prior to combining with the discharge of Air Product's stormwater discharge point.

Outfall 003, at the point of discharge from the North Ditch at the northeast corner of the polymers complex.

Outfall 004, at the point of discharge from the concrete structure at the southeast corner of the AO-ID-2 unit.

Outfall 005, at the point of discharge from the outfall structure south of the PDO-1 process unit.

## FOOTNOTE(S):

(\*1) When discharging.

(\*2) The permittee shall report on the Discharge Monitoring Report both the minimum and maximum instantaneous pH values measured.

## PART I

Page 12 of 14  
 Permit No. Draft LA0005754  
 AI No. 1136

## EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS (continued)

During the period beginning the effective date and lasting through the expiration date the permittee is authorized to discharge from:

Outfall 006, the intermittent discharge of non-process area stormwater including fire system flush waters, PDO fire water overflow, and non-contaminated stormwater from tank farm drainage collection system, and previously monitored effluent from Outfall 106.

Such discharges shall be limited and monitored by the permittee as specified below:

Effluent Characteristic	STORET Code	Discharge Limitations				Monitoring Requirements	
		(lbs/day, UNLESS STATED)		Other Units (mg/L, UNLESS STATED)		Measurement Frequency (*1)	Sample Type
		Monthly Average	Daily Maximum	Monthly Average	Daily Maximum		
Flow-MGD	50050	Report	Report	---	---	1/discharge	Estimate
TOC	00680	---	---	---	50	1/discharge	Grab
Oil & Grease	03582	---	---	---	15	1/discharge	Grab
pH Minimum/Maximum Values	00400	---	---	6.0 (*2) (Min)	9.0 (*2) (Max)	1/discharge	Grab

There shall be no discharge of floating solids or visible foam in other than trace amounts.

Samples taken in compliance with the monitoring requirements specified above shall be taken at the following locations:

Outfall 006, at the point of discharge prior to commingling with other waters.

## FOOTNOTE(S):

(\*1) When discharging.

(\*2) The permittee shall report on the Discharge Monitoring Report both the minimum and maximum instantaneous pH values measured.

## PART I

Page 13 of 14  
 Permit No. Draft LA0005754  
 AI No. 1136

## EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS (continued)

During the period beginning the effective date and lasting through the expiration date the permittee is authorized to discharge from:

Outfall 106, the continuous discharge of cooling tower blowdown from the PDO/Comfac cooling tower.

Such discharges shall be limited and monitored by the permittee as specified below:

Effluent Characteristic	STORET Code	Discharge Limitations				Monitoring Requirements	
		Other Units				Measurement Frequency	Sample Type
		(lbs/day, UNLESS STATED)		(mg/L, UNLESS STATED)			
		Monthly Average	Daily Maximum	Monthly Average	Daily Maximum		
Flow-MGD	50050	Report	Report	---	---	1/week	Estimate
TOC	00680	---	---	---	5(*1)	1/week	Grab

Samples taken in compliance with the monitoring requirements specified above shall be taken at the following location(s):

Outfall 106, at the point of discharge of the PDO cooling tower prior to combining with other waters.

## FOOTNOTE(S):

- (\*1) The daily TOC concentration of the effluent less the daily TOC concentration of the raw river water intake shall not exceed 5 mg/l. Concurrent monitoring by grab sampling of both intake and effluent is required. A net TOC concentration contribution calculated as a negative value due to analytical variability shall be reported as zero.

## PART I

Page 14 of 14  
Permit No. Draft LA0005754  
AI No. 1136

## EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS (continued)

During the period beginning the effective date and lasting through the expiration date the permittee is authorized to discharge from:

Outfall 007, the intermittent discharge of hydrostatic test water.

Such discharges shall be limited and monitored by the permittee as specified below:

Effluent Characteristic	STORET Code	Discharge Limitations				Monitoring Requirements	
		(lbs/day, UNLESS STATED)		Other Units (mg/L, UNLESS STATED)		Measurement Frequency	Sample Type
		Monthly Average	Daily Maximum	Monthly Average	Daily Maximum		
Flow-MGD	50050	---	Report	---	---	1/discharge	Estimate
TSS (*1 & 2)	00530	---	---	---	90	1/discharge	Grab
Benzene(*2)	34030	---	---	---	50 µg/L	1/discharge	Grab
Total BTEX (*2 & 3)	30383	---	---	---	250 µg/L	1/discharge	Grab
Total Lead (*2)	01051	---	---	---	50 µg/L	1/discharge	Grab
pH Min/Max Values(*2)	00400	---	---	6.0	9.0	1/discharge	Grab
(Standard Units)				(Min)	(Max)		

Samples taken in compliance with the monitoring requirements specified above shall be taken at the following location(s):

Outfall 007, at the point of discharge from the pipe or vessel being tested prior to combining with other waters.

## FOOTNOTE(S):

- (\*1) The background concentration of Total Suspended Solids (TSS) will be allowed in the discharge if the effluent is being returned to the same water source from which the intake water was obtained. In these cases, the permit limitations will be 90 mg/L plus the concentration of TSS in the intake water. The TSS concentration of the intake water shall be reported on the Discharge Monitoring Report (DMR) along with the concentration of TSS in the effluent.
- (\*2) Benzene, Total BTEX, and Total Lead shall be measured on discharges from pipelines or vessels which have been used for the storage or transportation of liquid or gaseous petroleum hydrocarbons. Flow, TSS, and pH are the only testing requirements for new pipe or vessels.
- (\*3) BTEX shall be measured as the sum of benzene, toluene, ethylbenzene, and total xylene (including ortho-, meta-, and para-xylene) as quantified by the last approved EPA method at 40 CFR 136.



## PART II

### OTHER REQUIREMENTS

In addition to the standard conditions required in all permits and listed in Part III, the Office has established the following additional requirements in accordance with the Louisiana Water Quality Regulations.

- A. The Department of Environmental Quality reserves the right to impose more stringent discharge limitations or additional restrictions, if necessary, to maintain the water quality integrity and the designated uses of the receiving water bodies.
- B. This permit does not in any way authorize the permittee to discharge a pollutant not listed or quantified in the application or limited or monitored for in the permit.
- C. Authorization to discharge pursuant to the conditions of this permit does not relieve the permittee of any liability for damages to state waters or private property. For discharges to private land, this permit does not relieve the permittee from obtaining proper approval from the landowner for appropriate easements and rights of way.
- D. For definitions of monitoring and sampling terminology see Part III, Section F.
- E. 24-HOUR ORAL REPORTING: DAILY MAXIMUM LIMITATION VIOLATIONS

Under the provisions of Part III.D.6.e.(3) of this permit, violations of daily maximum limitations for the following pollutants shall be reported orally to the Office of Environmental Compliance within 24 hours from the time the permittee became aware of the violation followed by a written report in five days.

#### MISC. PARAMETERS

Total BTEX

#### METALS

Total Zinc

Total Lead

#### VOLATILE COMPOUNDS

Acrylonitrile

Benzene

Carbon Tetrachloride

Chlorobenzene

Chloroethane

Chloroform

1,1-Dichloroethane

1,2-Dichloroethane

1,1-Dichloroethylene

1,2-trans-Dichloroethylene

1,2-Dichloropropane

1,3-Dichloropropylene

Ethylbenzene

Methyl Chloride

Methylene Chloride

Tetrachloroethylene

Toluene

1,1,1-Trichloroethane

1,1,2-Trichloroethane

Trichloroethylene

Part II

Page 2 of 21

Permit No. Draft LA0005754

AI No. 1136

## OTHER REQUIREMENTS (continued)

Vinyl Chloride

ACID COMPOUNDS

2-Chlorophenol

2,4-Dichlorophenol

2,4-Dimethylphenol

4,6-Dinitro-o-cresol

2,4-Dinitrophenol

2-Nitrophenol

4-Nitrophenol

Phenol

BASE NEUTRAL COMPOUNDS

Acenaphthene

Acenaphthylene

Anthracene

Benzo(a)anthracene

Benzo(a)pyrene

3,4-Benzofluoranthene

Benzo(k)fluoranthene

Bis(2-ethylhexyl)phthalate

Chrysene

1,2-Dichlorobenzene

1,3-Dichlorobenzene

1,4-Dichlorobenzene

Diethyl phthalate

Dimethyl phthalate

Di-n-butyl phthalate

2,4-Dinitrotoluene

2,6-Dinitrotoluene

Fluoranthene

Fluorene

Hexachlorobenzene

Hexachlorobutadiene

Hexachloroethane

Naphthalene

Nitrobenzene

Phenanthrene

Pyrene

1,2,4-Trichlorobenzene

F. COMPOSITE SAMPLING (24-HOUR)1. STANDARD PROVISIONS

Unless otherwise specified in this permit, the term "24-hour composite sample" means a sample consisting of a minimum of four (4) aliquots of effluent collected at regular intervals over a normal 24-hour operating day and combined in proportion to flow or a sample continuously collected in proportion to flow over a normal 24-hour operating period.

## Part II

Page 3 of 21

Permit No. Draft LA0005754

AI No. 1136

## OTHER REQUIREMENTS (continued)

2. VOLATILE COMPOUNDS

For the "24-hour composite" sampling of volatile compounds using EPA Methods 601, 602, 603, 624, 1624, or any other 40 CFR Part 136 (See LAC 33:IX.4901) method approved after the effective date of the permit, the permittee shall manually collect four (4) aliquots (grab samples) in clean zero head-space containers at regular intervals during the actual hours of discharge during the 24-hour sampling period using sample collection, preservation, and handling techniques specified in the test method. These aliquots must be combined in the laboratory to represent the composite sample of the discharge. One of the following alternative methods shall be used to composite these aliquots.

- a. Each aliquot is poured into a syringe. The plunger is added, and the volume in the syringe is adjusted to 1-1/4 ml. Each aliquot (1-1/4 ml.) is injected into the purging chamber of the purge and trap system. After four (4) injections (total 5 ml.), the chamber is purged. Only one analysis or run is required since the aliquots are combined prior to analysis.
- b. Chill the four (4) aliquots to 4 Degrees Centigrade. These aliquots must be of equal volume. Carefully pour the contents of each of the four aliquots into a 250-500 ml. flask which is chilled in a wet ice bath. Stir the mixture gently with a clean glass rod while in the ice bath. Carefully fill two (2) or more clean 40 ml. zero head-space vials from the flask and dispose of the remainder of the mixture. Analyze one of the aliquots to determine the concentration of the composite sample. The remaining aliquot(s) are replicate composite samples that can be analyzed if desired or necessary.
- c. Alternative sample compositing methods may be used following written approval by this Office.

The individual samples resulting from the application of these compositing methods shall be analyzed following the procedures specified for the selected test method. The resulting analysis shall be reported as the daily composite concentration.

As an option to the above compositing methods, the permittee may manually collect four (4) aliquots (grab samples) in clean zero head-space containers at regular intervals during the actual hours of discharge during the 24-hour sampling period using sample collection, preservation, and handling techniques specified in the test method. A separate analysis shall be conducted for each discrete grab sample following the approved test methods. The determination of daily composite concentration shall be the arithmetic average (weighted by flow) of all grab samples collected during the 24-hour sampling period.

G. 40 CFR PART 136 (See LAC 33:IX.4901) ANALYTICAL REQUIREMENTS

Unless otherwise specified in this permit, monitoring shall be conducted according to analytical, apparatus and materials, sample collection, preservation, handling, etc., procedures listed at 40 CFR Part 136, and in particular, Appendices A, B, and C (See LAC 33:IX.4901).

## Part II

Page 4 of 21

Permit No. Draft LA0005754

AI No. 1136

## OTHER REQUIREMENTS (continued)

H. FLOW MEASUREMENT "ESTIMATE" SAMPLE TYPE

If the flow measurement sample type in Part I is specified as "estimate", flow measurements shall not be subject to the accuracy provisions established at Part III.C.6 of this permit. The daily flow value may be estimated using best engineering judgement.

I. pH RANGE EXCURSION PROVISIONS

Where a permittee continuously measures the pH of wastewater as a requirement or option in a Louisiana Pollutant Discharge Elimination System (LPDES) permit, the permittee shall maintain the pH of such wastewater within the range set forth in the permit, except that excursions from the range are permitted, provided:

1. The total time during which the pH values are outside the required range of pH values shall not exceed 446 minutes in any calendar month; and
2. No individual excursion from the range of pH values shall exceed 60 minutes.

For the purposes of this section, an "excursion" is an unintentional and temporary incident in which the pH value of discharge wastewater exceeds the range set forth in the permit.

J. MINIMUM QUANTIFICATION LEVEL (MQL)

If any individual analytical test result is less than the minimum quantification level listed below, a value of zero (0) may be used for that individual result for the Discharge Monitoring Report (DMR) calculations and reporting requirements.

<u>NONCONVENTIONAL</u>	<u>MQL (µg/L)</u>
Phenolics, Total Recoverable (4AAP)	5
Chlorine (Total Residual)	100
3-Chlorophenol	10
4-Chlorophenol	10
2,3-Dichlorophenol	10
2,5-Dichlorophenol	10
2,6-Dichlorophenol	10
3,4-Dichlorophenol	10
2,4-D	10
2,4,5-TP (Silvex)	4

<u>METALS AND CYANIDE</u>	<u>MQL (µg/L)</u>
Antimony (Total)	60
Arsenic (Total)	10
Beryllium (Total)	5
Cadmium (Total)	1
Chromium (Total)	10
Chromium (3+)	10
Chromium (6+)	10
Copper (Total)	10
Lead (Total)	5
Mercury (Total)	0.2
Molybdenum (Total)	30

## Part II

Page 5 of 21

Permit No. Draft LA0005754

AI No. 1136

## OTHER REQUIREMENTS (continued)

Nickel (Total) Freshwater	40
Nickel (Total) Marine	5
Selenium (Total)	5
Silver (Total)	2
Thallium (Total)	10
Zinc (Total)	20
Cyanide (Total)	20
<u>DIOXIN</u>	<u>MQL (µg/L)</u>
2,3,7,8-TCDD	0.00001
<u>VOLATILE COMPOUNDS</u>	<u>MQL (µg/L)</u>
Acrolein	50
Acrylonitrile	50
Benzene	10
Bromoform	10
Carbon Tetrachloride	10
Chlorobenzene	10
Chlorodibromomethane	10
Chloroethane	50
2-Chloroethylvinylether	10
Chloroform	10
Dichlorobromomethane	10
1,1-Dichloroethane	10
1,2-Dichloroethane	10
1,1-Dichloroethylene	10
1,2-Dichloropropane	10
1,3-Dichloropropylene	10
Ethylbenzene	10
Methyl Bromide [Bromomethane]	50
Methyl Chloride [Chloromethane]	50
Methylene Chloride	20
1,1,2,2-Tetrachloroethane	10
Tetrachloroethylene	10
Toluene	10
1,2-trans-Dichloroethylene	10
1,1,1-Trichloroethane	10
1,1,2-Trichloroethane	10
Trichloroethylene	10
Vinyl Chloride	10
<u>ACID COMPOUNDS</u>	<u>MQL (µg/L)</u>
2-Chlorophenol	10
2,4-Dichlorophenol	10
2,4-Dimethylphenol	10
4,6-Dinitro-o-Cresol [2-Methyl-4,6-Dinitrophenol]	50
2,4-Dinitrophenol	50
2-Nitrophenol	20
4-Nitrophenol	50
p-Chloro-m-Cresol [4-Chloro-3-Methylphenol]	10

## Part II

Page 6 of 21

Permit No. Draft LA0005754

AI No. 1136

## OTHER REQUIREMENTS (continued)

Pentachlorophenol	50
Phenol	10
2,4,6-Trichlorophenol	10
<u>BASE/NEUTRAL COMPOUNDS</u>	<u>MOI (µg/L)</u>
Acenaphthene	10
Acenaphthylene	10
Anthracene	10
Benzidine	50
Benzo(a)anthracene	10
Benzo(a)pyrene	10
3,4-Benzofluoranthene	10
Benzo(ghi)perylene	20
Benzo(k)fluoranthene	10
Bis(2-chloroethoxy) Methane	10
Bis(2-chloroethyl) Ether	10
Bis(2-chloroisopropyl) Ether	10
Bis(2-ethylhexyl) Phthalate	10
4-Bromophenyl Phenyl Ether	10
Butylbenzyl Phthalate	10
2-Chloronaphthalene	10
4-Chlorophenyl Phenyl Ether	10
Chrysene	10
Dibenzo(a,h)anthracene	20
1,2-Dichlorobenzene	10
1,3-Dichlorobenzene	10
1,4-Dichlorobenzene	10
3,3'-Dichlorobenzidine	50
Diethyl Phthalate	10
Dimethyl Phthalate	10
Di-n-Butyl Phthalate	10
2,4-Dinitrotoluene	10
2,6-Dinitrotoluene	10
Di-n-octyl Phthalate	10
1,2-Diphenylhydrazine	20
Fluoranthene	10
Fluorene	10
Hexachlorobenzene	10
Hexachlorobutadiene	10
Hexachlorocyclopentadiene	10
Hexachloroethane	20
Indeno(1,2,3-cd)pyrene [2,3-o-Phenylene Pyrene]	20
Isophorone	10
Naphthalene	10
Nitrobenzene	10
n-Nitrosodimethylamine	50
n-Nitrosodi-n-Propylamine	20
n-Nitrosodiphenylamine	20
Phenanthrene	10
Pyrene	10
1,2,4-Trichlorobenzene	10

Part II

Page 7 of 21

Permit No. Draft LA0005754

AI No. 1136

## OTHER REQUIREMENTS (continued)

<u>PESTICIDES</u>	<u>MQL (µg/L)</u>
Aldrin	0.05
Alpha-BHC	0.05
Beta-BHC	0.05
Gamma-BHC [Lindane]	0.05
Delta-BHC	0.05
Chlordane	0.2
4,4'-DDT	0.1
4,4'-DDE [p,p-DDX]	0.1
4,4'-DDD [p,p-TDE]	0.1
Dieldrin	0.1
Alpha-Endosulfan	0.1
Beta-Endosulfan	0.1
Endosulfan Sulfate	0.1
Endrin	0.1
Endrin Aldehyde	0.1
Heptachlor	0.05
Heptachlor Epoxide [BHC-Hexachlorocyclohexane]	0.05
PCB-1242	1.0
PCB-1254	1.0
PCB-1221	1.0
PCB-1232	1.0
PCB-1248	1.0
PCB-1260	1.0
PCB-1016	1.0
Toxaphene	5.0

The permittee may develop an effluent specific method detection limit (MDL) in accordance with Appendix B to 40 CFR Part 136 (Sec LAC 33:IX.4901). For any pollutant for which the permittee determines an effluent specific MDL, the permittee shall send to this Office a report containing QA/QC documentation, analytical results, and calculations necessary to demonstrate that the effluent specific MDL was correctly calculated. An effluent specific minimum quantification level (MQL) shall be determined in accordance with the following calculation:

$$\text{MQL} = 3.3 \times \text{MDL}$$

Upon written approval by this Office, the effluent specific MQL may be utilized by the permittee for all future Discharge Monitoring Report (DMR) calculations and reporting requirements.

- K. The permittee shall achieve compliance with the effluent limitations and monitoring requirements specified for discharges in accordance with the following schedule:

Effective date of the permit

L. PERMIT REOPENER CLAUSE

In accordance with LAC 33:IX.2903, this permit may be modified, or alternatively, revoked and reissued, to comply with any applicable effluent standard or limitations issued or

## Part II

Page 8 of 21

Permit No. Draft LA0005754

AI No. 1136

## OTHER REQUIREMENTS (continued)

approved under sections 301(b)(2)(c) and (D); 304(b)(2); and 307(a)(2) of the Clean Water Act, if the effluent standard or limitations so issued or approved:

1. Contains different conditions or is otherwise more stringent than any effluent limitation in the permit; or
2. Controls any pollutant not limited in the permit; or
3. Require reassessment due to change in 303(d) status of waterbody; or
4. Incorporates the results of any total maximum daily load allocation, which may be approved for the receiving water body.

The Louisiana Department of Environmental Quality (LDEQ) reserves the right to impose more stringent discharge limitations and/or additional restrictions in the future to maintain the water quality integrity and the designated uses of the receiving water bodies based upon additional water quality studies and/or TMDL's. The LDEQ also reserves the right to modify or revoke and reissue this permit based upon any changes to established TMDL's for this discharge, or to accommodate for pollutant trading provisions in approved TMDL watersheds as necessary to achieve compliance with water quality standards. Therefore, prior to upgrading or expanding this facility, the permittee should contact the Department to determine the status of the work being done to establish future effluent limitations and additional permit conditions.

M. STORMWATER DISCHARGES

1. This section applies to all stormwater discharges from the facility, either through permitted outfalls or through outfalls which are not listed in the permit or as sheet flow. The purpose of the pollution prevention plan is to identify potential sources of pollution that would reasonably be expected to affect the quality of stormwater and identify the practices that will be used to prevent or reduce the pollutants in stormwater discharges.
2. Any runoff leaving the developed areas of the facility, other than the permitted outfall(s), exceeding 50 mg/L TOC, 15 mg/L Oil and Grease, or having a pH less than 6.0 or greater than 9.0 standard units shall be a violation of this permit. Any discharge in excess of these limitations, which is attributable to offsite contamination shall not be considered a violation of this permit. A visual inspection of the facility shall be conducted and a report made annually as described in Paragraph 4 below.
3. The permittee shall prepare, implement, and maintain a Storm Water Pollution Prevention Plan (SWP3) within six (6) months of the effective date of the final permit. The terms and conditions of the SWP3 shall be an enforceable Part of the permit. If the permittee maintains other plans that contain duplicative information, those plans could be incorporated by reference into the SWP3. Examples of these type plans include, but are not limited to: Spill Prevention Control and Countermeasure Plan (SPCC), Best Management Plan (BMP), Response Plans, etc. EPA document 833-R-92-006 (Storm Water Management for Industrial Activities) may be used as a guidance and may be obtained by writing to the Water Resource Center (RC 4100), U.S. Environmental Protection Agency, 1200 Pennsylvania Avenue NW, Washington D.C. 20460 or by calling (202) 566-1729 or via the Wetlands Helpline (800) 832-7828.



## Part II

Page 9 of 21

Permit No. Draft LA0005754

AI No. 1136

## OTHER REQUIREMENTS (continued)

4. The following conditions are applicable to all facilities and shall be included in the SWP3 for the facility.
  - a. The permittee shall conduct an annual inspection of the facility site to identify areas contributing to the storm water discharge from developed areas of the facility and evaluate whether measures to reduce pollutant loadings identified in the SWP3 are adequate and have been properly implemented in accordance with the terms of the permit or whether additional control measures are needed.
  - b. The permittee shall develop a site map which includes all areas where stormwater may contact potential pollutants or substances which can cause pollution. Any location where reportable quantities leaks or spills have previously occurred are to be documented in the SWP3. The SWP3 shall contain a description of the potential pollutant sources, including, the type and quantity of material present and what action has been taken to assure stormwater precipitation will not directly contact the substances and result in contaminated runoff.
  - c. Where experience indicates a reasonable potential for equipment failure (e.g. a tank overflow or leakage), natural condition of (e.g. precipitation), or other circumstances which result in significant amounts of pollutants reaching surface waters, the SWP3 should include a prediction of the direction, rate of flow and total quantity of pollutants which could be discharged from the facility as a result of each condition or circumstance.
  - d. The permittee shall maintain for a period of three years a record summarizing the results of the inspection and a certification that the facility is in compliance with the SWP3, and identifying any incidents of noncompliance. The summary report should contain, at a minimum, the date and time of inspection, name of inspector(s), conditions found, and changes to be made to the SWP3.
  - e. The summary report and the following certification shall be signed in accordance with LAC 33:IX.2503. The summary report is to be attached to the SWP3 and provided to the Department upon request.

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

Signatory requirements for the certification may be found in Part III, Section D.10 of this permit.

- f. The permittee shall make available to the Department, upon request, a copy of the SWP3 and any supporting documentation.
5. The following shall be included in the SWP3, if applicable.

## Part II

Page 10 of 21

Permit No. Draft LA0005754

AI No. 1136

## OTHER REQUIREMENTS (continued)

- a. The permittee shall utilize all reasonable methods to minimize any adverse impact on the drainage system including but not limited to:
  - i. maintaining adequate roads and driveway surfaces;
  - ii. removing debris and accumulated solids from the drainage system; and
  - iii. cleaning up immediately any spill by sweeping, absorbent pads, or other appropriate methods.
- b. All spilled product and other spilled wastes shall be immediately cleaned up and disposed of according to all applicable regulations, Spill Prevention and Control (SPC) plans or Spill Prevention Control and Countermeasures (SPCC) plans. Use of detergents, emulsifiers, or dispersants to clean up spilled product is prohibited except where necessary to comply with State or Federal safety regulations (i.e., requirement for non-slippery work surface) except where the cleanup practice does not result in a discharge and does not leave residues exposed to future storm events. In all such cases, initial cleanup shall be done by physical removal and chemical usage shall be minimized.
- c. All equipment, parts, dumpsters, trash bins, petroleum products, chemical solvents, detergents, or other materials exposed to stormwater shall be maintained in a manner which prevents contamination of stormwater by pollutants.
- d. All waste fuel, lubricants, coolants, solvents, or other fluids used in the repair or maintenance of vehicles or equipment shall be recycled or contained for proper disposal. Spills of these materials are to be cleaned up by dry means whenever possible.
- e. If applicable, all storage tank installations (with a capacity greater than 660 gallons for an individual container, or 1,320 gallons for two or more containers in aggregate within a common storage area) shall be constructed so that a secondary means of containment is provided for the entire contents of the largest tank plus sufficient freeboard to allow for precipitation. Diked areas should be sufficiently impervious to contain spills.
- f. All diked areas surrounding storage tanks or stormwater collection basins shall be free of residual oil or other contaminants so as to prevent the accidental discharge of these materials in the event of flooding, dike failure, or improper draining of the diked area. All drains from diked areas shall be equipped with valves which shall be kept in the closed condition except during periods of supervised discharge.
- g. All check valves, tanks, drains, or other potential sources of pollutant releases shall be inspected and maintained on a regular basis to assure their proper operation and to prevent the discharge of pollutants.
- h. The permittee shall assure compliance with all applicable regulations promulgated under the Louisiana Solid Waste and Resource Recovery Law and the Hazardous Waste Management Law (L.R.S. 30:2151, etc.). Management practices required under above regulations shall be referenced in the SWP3.

## Part II

Page 11 of 21

Permit No. Draft LA0005754

AI No. 1136

## OTHER REQUIREMENTS (continued)

- i. The permittee shall amend the SWP3 whenever there is a change in the facility or change in the operation of the facility which materially increases the potential for the ancillary activities to result in a discharge of significant amounts of pollutants.
  - j. If the SWP3 proves to be ineffective in achieving the general objectives of preventing the release of significant amounts of pollutants to water of the state, then the specific objectives and requirements of the SWP3 shall be subject to modification to incorporate revised SWP3 requirements.
6. Facility Specific SWP3 Conditions:

None

N. DISCHARGE MONITORING REPORTS

Monitoring results must be reported on a Discharge Monitoring Report (DMR) form (EPA No. 3320-1 or an approved substitute). All monitoring reports must be retained for a period of at least three (3) years from the date of the sample measurement. The permittee shall make available to this Department, upon request, copies of all monitoring data required by this permit.

If there is no discharge during the reporting period, place an "X" in the NO DISCHARGE box located in the upper right corner of the Discharge Monitoring Report for that outfall.

Monitoring results for each reporting period shall be summarized on a Discharge Monitoring Report (DMR) Form (one DMR form per monitoring period per outfall) and submitted to the Office of Environmental Compliance either hand delivered or postmarked no later than the 15th day of the month following each reporting period.

1. For parameters that require a monitoring frequency of monthly, bimonthly or more frequent (ex: weekly, 3/week, biweekly, 1/batch, 1/discharge, etc), DMRs shall be submitted by the 15th of following month.
2. For parameters that require a monitoring frequency of quarterly, DMRs shall be submitted in accordance with the following schedule:

<u>Monitoring Period</u>	<u>DMR Postmark Date</u>
January, February, March	April 15th
April, May, June	July 15th
July, August, September	October 15th
October, November, December	January 15th

3. For parameters that require a semiannual monitoring frequency, DMRs shall be submitted in accordance with the following schedule:

<u>Monitoring Period</u>	<u>DMR Postmark Date</u>
January - June	July 15th
July - December	January 15th

## Part II

Page 12 of 21

Permit No. Draft LA0005754

AI No. 1136

## OTHER REQUIREMENTS (continued)

4. For parameters that require an annual monitoring frequency, DMRs shall be submitted in accordance with the following schedule:

<u>Monitoring Period</u>	<u>DMR Postmark Date</u>
January-December	January 15th

For hydrostatic test discharges from the facility, the monitoring results for each hydrostatic test shall be summarized and reported on a Discharge Monitoring Report (DMR) form EPA 3320-1 or an approved substitute (one DMR per event), and submitted to the Office of Environmental Compliance on a quarterly basis (in accordance with the quarterly submittal schedule above). If there is no discharge during an entire quarter, one DMR shall be submitted with "No Discharge" written in the upper right corner of the DMR.

Duplicate copies of DMR's (one set of originals and one set of copies) signed and certified as required by LAC 33:IX.2503, and all other reports (one set of originals) required by this permit shall be submitted to the Permit Compliance Unit at the following address:

Department of Environmental Quality  
Office of Environmental Compliance  
Permit Compliance Unit  
Post Office Box 4312  
Baton Rouge, Louisiana 70821-4312

O. 48 HR ACUTE BIOMONITORING REQUIREMENTS: FRESHWATER

It is unlawful and a violation of this permit for a permittee or the designated agent, to manipulate test samples in any manner, to delay sample shipment, or to terminate or to cause to terminate a toxicity test. Once initiated, all toxicity tests must be completed unless specific authority has been granted by the Louisiana Department of Environmental Quality.

1. SCOPE AND METHODOLOGY

- a. The permittee shall test the effluent for toxicity in accordance with the provisions in this section.

APPLICABLE TO OUTFALL(S): 001

REPORTED ON DMR AS FINAL OUTFALL: TX1

CRITICAL DILUTION: 4.2%

EFFLUENT DILUTION SERIES: 1.8%, 2.4%, 3.2%, 4.2%, and 5.6%

COMPOSITE SAMPLE TYPE: Defined at PART I

TEST SPECIES/METHODS: 40 CFR Part 136 (See LAC 33:IX.4901)

## Part II

Page 13 of 21

Permit No. Draft LA0005754

AI No. 1136

## OTHER REQUIREMENTS (continued)

Daphnia pulex acute static renewal 48-hour definitive toxicity test using EPA 821-R-02-012, or the latest update thereof. A minimum of five (5) replicates with ten (10) organisms per replicate must be used in the control and in each effluent dilution of this test.

Pimephales promelas (Fathead minnow) acute static renewal 48-hour definitive toxicity test using EPA 821-R-02-012, or the latest update thereof. A minimum of five (5) replicates with ten (10) organisms per replicate must be used in the control and in each effluent dilution of this test.

- b. The NOEC (No Observed Effect Concentration) is defined as the greatest effluent dilution at and below which lethality that is statistically different from the control (0% effluent) at the 95% confidence level does not occur.
- c. This permit may be reopened to require whole effluent toxicity limits, chemical specific effluent limits, additional testing, and/or other appropriate actions to address toxicity.
- d. Test failure is defined as a demonstration of statistically significant lethal effects to a test species at or below the effluent critical dilution.

2. PERSISTENT LETHALITY

The requirements of this subsection apply only when a toxicity test demonstrates significant lethal effects at or below the critical dilution. Significant lethal effects are herein defined as a statistically significant difference at the 95% confidence level between the survival of the appropriate test organism in a specified effluent dilution and the control (0% effluent).

If any valid test demonstrates significant lethal effects to a test species at or below the critical dilution, the frequency of testing for that species is automatically increased to once per quarter for the term of the permit.

a. Part I Testing Frequency Other Than Monthly

- i. The permittee shall conduct a total of three (3) additional tests for any species that demonstrates statistically significant lethal toxic effects at the critical dilution or lower effluent dilutions. The additional tests shall be conducted monthly during the next three consecutive months in which a discharge occurs to determine if toxicity is persistent or occurs on a periodic basis. The purpose of this testing is to determine whether toxicity is present at a level and frequency that will provide toxic sample results to use in performing a Toxicity Reduction Evaluation (TRE). If no additional test failures occur during the retest monitoring period, the testing frequency will be once per quarter for the term of the permit or until another test failure occurs. The permittee may substitute one of the additional tests in lieu of one routine toxicity test. A full report shall be prepared for each test required by this section in accordance with procedures outlined in item 4 of this

## Part II

Page 14 of 21

Permit No. Draft LA0005754

AI No. 1136

## OTHER REQUIREMENTS (continued)

section and submitted with the period discharge monitoring report (DMR) to the permitting authority for review.

- ii. If any of the valid additional tests demonstrates significant lethal effects at or below the critical dilution, the permittee shall initiate Toxicity Reduction Evaluation (TRE) requirements as specified in item 5 of this section. The permittee shall notify the Department of Environmental Quality, Office of Environmental Compliance - Permit Compliance Unit in writing within 5 days of the failure of any retest, and the TRE initiation date will be the test completion date of the first failed retest. A TRE may also be required due to a demonstration of intermittent lethal effects at or below the critical dilution, or for failure to perform the required retests.
- iii. The provisions of item 2.a are suspended upon submittal of the **TRE Action Plan**.

3. REQUIRED TOXICITY TESTING CONDITIONSa. Test Acceptance

The permittee shall repeat a test, including the control and all effluent dilutions, if the procedures and quality assurance requirements defined in the test methods or in this permit are not satisfied, including the following additional criteria:

- i. Each toxicity test control (0% effluent) must have a survival equal to or greater than 90%.
- ii. The percent coefficient of variation between replicates shall be 40% or less in the control (0% effluent) for the Daphnia pulex survival test and the Fathead minnow survival test.
- iii. The percent coefficient of variation between replicates shall be 40% or less in the critical dilution, unless significant lethal effects are exhibited for the Daphnia pulex survival test and the Fathead minnow survival test.

Test failure may not be construed or reported as invalid due to a coefficient of variation value of greater than 40%. A repeat test shall be conducted within the required reporting period of any test determined to be invalid.

b. Statistical Interpretation

For the Daphnia pulex survival test and the Fathead minnow survival test, the statistical analyses used to determine if there is a statistically significant difference between the control and the critical dilution shall be in accordance with the methods for determining the No Observed Effect Concentration (NOEC) as described in EPA 821-R-02-012, or the most recent update thereof.

## Part II

Page 15 of 21

Permit No. Draft LA0005754

AI No. 1136

## OTHER REQUIREMENTS (continued)

If the conditions of Test Acceptability are met in Item 3.a above and the percent survival of the test organism is equal to or greater than 90% in the critical dilution concentration and all other concentrations, the test shall be considered to be a passing test and the permittee shall report a NOEC of not less than the critical dilution for the DMR reporting requirements found in Item 4 below.

c. Dilution Water

- i. Dilution water used in the toxicity tests will be receiving water collected as close to the point of discharge as possible but unaffected by the discharge. The permittee shall substitute synthetic dilution water of similar pH, hardness, and alkalinity to the closest downstream perennial water for;
  - (A) toxicity tests conducted on effluent discharges to receiving water classified as intermittent streams; and
  - (B) toxicity tests conducted on effluent discharges where no receiving water is available due to zero flow conditions.
- ii. If the receiving water is unsatisfactory as a result of instream toxicity (fails to fulfill the test acceptance criteria of item 3.a), the permittee may substitute synthetic dilution water for the receiving water in all subsequent tests provided the unacceptable receiving water test met the following stipulations:
  - (A) a synthetic dilution water control which fulfills the test acceptance requirements of item 3.a was run concurrently with the receiving water control;
  - (B) the test indicating receiving water toxicity has been carried out to completion (i.e., 48 hours);
  - (C) the permittee includes all test results indicating receiving water toxicity with the full report and information required by item 4 below; and
  - (D) the synthetic dilution water shall have a pH, hardness, and alkalinity similar to that of the receiving water or closest downstream perennial water not adversely affected by the discharge, provided the magnitude of these parameters will not cause toxicity in the synthetic dilution water.

d. Samples and Composites

- i. The permittee shall collect two 24-hour flow-weighted composite samples from the outfall(s) listed at item 1.a above. A 24-hour composite sample consists of a minimum of 4 effluent portions collected at equal time intervals representative of a 24-hour

## Part II

Page 16 of 21

Permit No. Draft LA0005754

AI No. 1136

## OTHER REQUIREMENTS (continued)

operating day and combined proportional to flow or a sample continuously collected proportional to flow over a 24-hour operating day.

- ii. The permittee shall collect a second 24-hour composite sample for use during the 24-hour renewal of each dilution concentration for both tests. The permittee must collect the 24-hour composite samples so that the maximum holding time for any effluent sample shall not exceed 36 hours. The permittee must have initiated the toxicity test within 36 hours after the collection of the last portion of the first 24-hour composite sample. Samples shall be chilled to 0-6 degrees Centigrade during collection, shipping and/or storage.
- iii. The permittee must collect the 24-hour composite samples such that the effluent samples are representative of any periodic episode of chlorination, biocide usage or other potentially toxic substance discharged on an intermittent basis.
- iv. If the flow from the outfall(s) being tested ceases during the collection of effluent samples, the requirements for the minimum number of effluent samples, the minimum number of effluent portions and the sample holding time are waived during that sampling period. However, the permittee must collect an effluent composite sample volume during the period of discharge that is sufficient to complete the required toxicity tests with daily renewal of effluent. When possible, the effluent samples used for the toxicity tests shall be collected on separate days. The effluent composite sample collection duration and the static renewal protocol associated with the abbreviated sample collection must be documented in the full report required in item 4 of this section.

4. REPORTING

- a. A valid test must be completed and test results must be submitted for each species during each Monitoring Period. The permittee shall prepare a full report of the results of all tests conducted pursuant to this Part in accordance with the Report Preparation Section of EPA 821-R-02-012, for every valid or invalid toxicity test initiated, whether carried to completion or not. The permittee shall retain each full report pursuant to the provisions of Part III.C.3 of this permit. For any test which fails, is considered invalid, or which is terminated early for any reason, the full report must be submitted for agency review. The permittee shall submit the first full report to:



## Part II

Page 17 of 21

Permit No. Draft LA0005754

AI No. 1136

## OTHER REQUIREMENTS (continued)

Department of Environmental Quality  
Office of Environmental Compliance  
Enforcement Division  
P.O. Box 4312  
Baton Rouge, Louisiana 70821-4312  
Attn: Permit Compliance Unit

- b. The permittee shall submit the results of each valid toxicity test on the DMR for that Monitoring Period in accordance with Part III.D.4 and the DMR Monitoring Period schedule contained in Part II of this permit. Submit retest information clearly marked as such on the DMR for the Monitoring Period in which the retest occurred. Only results of valid tests are to be reported on the DMR. The permittee shall submit the Table 1 and Table 2 Summary Sheets with each valid test.
- i. Pimephales promelas (Fathead minnow)
- (A) If the No Observed Effect Concentration (NOEC) for survival is less than the critical dilution, enter a "1"; otherwise, enter a "0" for Parameter No. TEM6C.
- (B) Report the NOEC value for survival, Parameter No. TOM6C.
- (C) Report the highest (critical dilution or control) Coefficient of Variation, Parameter No. TQM6C.
- ii. Daphnia pulex
- (A) If the NOEC for survival is less than the critical dilution, enter a "1"; otherwise, enter a "0" for Parameter No. TEM3D.
- (B) Report the NOEC value for survival, Parameter No. TOM3D.
- (C) Report the highest (critical dilution or control) Coefficient of Variation, Parameter No. TQM3D.
- iii. The permittee shall report the following results for all VALID toxicity retests on the DMR for that Monitoring Period.
- (A) Retest #1 (STORET 22415): If the first monthly retest following failure of a routine test for either test species results in an NOEC for survival less than the critical dilution, report a "1"; otherwise, report a "0."
- (B) Retest #2 (STORET 22416): If the second monthly retest following failure of a routine test for either test species results in an NOEC for survival less than the critical dilution, report a "1"; otherwise, report a "0."
- (C) Retest #3 (STORET 51443): If the third monthly retest following failure of a routine test for either test species results

## Part II

Page 18 of 21

Permit No. Draft LA0005754

AI No. 1136

## OTHER REQUIREMENTS (continued)

in an NOEC for survival less than the critical dilution, report a "1"; otherwise, report a "0".

If, for any reason, a retest cannot be performed during the Monitoring Period in which the triggering routine test failure is experienced, the permittee shall report it on the following Monitoring Period's DMR, and the comments section of the DMRs shall be annotated to that effect. If retesting is not required during a given Monitoring Period, the permittee shall leave these DMR fields blank.

The permittee shall submit the toxicity testing information contained in Tables 1 and 2 of this permit with the DMR subsequent to each and every toxicity test Monitoring Period. The DMR and the summary tables should be sent to the address indicated in 4.a. The permittee is not required to send the first complete report nor summary tables to EPA.

5. TOXICITY REDUCTION EVALUATION (TRE)

- a. Within ninety (90) days of **confirming lethality in any retest**, the permittee shall submit a **Toxicity Reduction Evaluation (TRE) Action Plan and Schedule** for conducting a TRE. The **TRE Action Plan** shall specify the approach and methodology to be used in performing the TRE. A Toxicity Reduction Evaluation is an investigation intended to determine those actions necessary to achieve compliance with water quality-based effluent requirements and/or chemical-specific limits by reducing an effluent's toxicity to an acceptable level. A TRE is defined as a step-wise process which combines toxicity testing and analyses of the physical and chemical characteristics of a toxic effluent to identify the constituents causing effluent toxicity and/or treatment methods which will reduce the effluent toxicity. The **TRE Action Plan** shall lead to the successful elimination of effluent toxicity at the critical dilution and include the following:
  - i. **Specific Activities.** The plan shall detail the specific approach the permittee intends to utilize in conducting the TRE. The approach may include toxicity characterizations, identifications and confirmation activities, source evaluation, treatability studies, or alternative approaches. When the permittee conducts Toxicity Characterization Procedures the permittee shall perform multiple characterizations and follow the procedures specified in the documents "**Methods for Aquatic Toxicity Identification Evaluations: Phase I Toxicity Characterization Procedures**" (EPA-600/6-91/003) and **Toxicity Identification Evaluation: Characterization of Chronically Toxic Effluents, Phase I**" (EPA-600/6-91/005), or alternate procedures. When the permittee conducts Toxicity Identification Evaluations and Confirmations, the permittee shall perform multiple identifications and follow the methods specified in the documents "**Methods for Aquatic Toxicity Identification Evaluations, Phase II Toxicity Identification Procedures for Samples Exhibiting Acute and Chronic Toxicity**" (EPA/600/R-92/080) and "**Methods for Aquatic Toxicity Identification Evaluations, Phase III Toxicity Confirmation**

Part II

Page 19 of 21

Permit No. Draft LA0005754

AI No. 1136

OTHER REQUIREMENTS (continued)

**Procedures for Samples Exhibiting Acute and Chronic Toxicity"**  
(EPA/600/R-92/081), as appropriate.

The documents referenced above may be obtained through the National Technical Information Service (NTIS) by phone at 1-800-553-6847, or by writing:

U.S. Department of Commerce  
National Technical Information Service  
5285 Port Royal Road  
Springfield, VA 22161

- ii. Sampling Plan (e.g., locations, methods, holding times, chain of custody, preservation, etc.). The effluent sample volume collected for all tests shall be adequate to perform the toxicity test, toxicity characterization, identification and confirmation procedures, and conduct chemical specific analyses when a probable toxicant has been identified;  
  
Where the permittee has identified or suspects specific pollutant(s) and/or source(s) of effluent toxicity, the permittee shall conduct, concurrent with toxicity testing, chemical specific analyses for the identified and/or suspected pollutant(s) and/or source(s) of effluent toxicity. Where lethality was demonstrated within 24 hours of test initiation, each 24-hour composite sample shall be analyzed independently. Otherwise the permittee may substitute a composite sample, comprised of equal portions of the individual 24-hour composite samples, for the chemical specific analysis;
- iii. Quality Assurance Plan (e.g., QA/QC implementation, corrective actions, etc.); and
- iv. Project Organization (e.g., project staff, project manager, consulting services, etc.).
- b. The permittee shall initiate the **TRE Action Plan** within thirty (30) days of plan and schedule submittal. The permittee shall assume all risks for failure to achieve the required toxicity reduction.
- c. The permittee shall submit a quarterly **TRE Activities Report**, with the Discharge Monitoring Report in the months of January, April, July and October, containing information on toxicity reduction evaluation activities including:
  - i. any data and/or substantiating documentation which identifies the pollutant(s) and/or source(s) of effluent toxicity;
  - ii. any studies/evaluations and results on the treatability of the facility's effluent toxicity; and

Part II

Page 20 of 21

Permit No. Draft LA0005754

AI No. 1136

## OTHER REQUIREMENTS (continued)

- iii. any data which identifies effluent toxicity control mechanisms that will reduce effluent toxicity to the level necessary to achieve compliance with permit biomonitoring requirements and/or chemical-specific limits.

The **TRE Activities Report** shall be submitted to the following addresses:

Department of Environmental Quality  
Office of Environmental Compliance  
Enforcement Division  
P.O. Box 4312  
Baton Rouge, Louisiana 70821-4312  
Attn: Permit Compliance Unit

U.S. Environmental Protection Agency, Region 6  
Water Enforcement Branch, 6 EN-WC  
1445 Ross Avenue  
Dallas, Texas 75202

- d. The permittee shall submit a Final Report on Toxicity Reduction Evaluation Activities no later than twenty-eight (28) months from confirming lethality in the retests, which provides information pertaining to the specific control mechanism selected that will, when implemented, result in the permittee achieving compliance with permit biomonitoring requirements and/or chemical-specific limits. The report will also provide a specific corrective action schedule for implementing the selected control mechanism.

A copy of the Final Report on Toxicity Reduction Evaluation Activities shall also be submitted to the above addresses.

- c. Quarterly testing during the TRE is a minimum monitoring requirement. LDEQ recommends that permittees required to perform a TRE not rely on quarterly testing alone to ensure success in the TRE, and that additional screening tests be performed to capture toxic samples for identification of toxicants. At the end of the TRE, LDEQ will consider all information submitted and establish appropriate controls to prevent future toxic discharges, including WET and/or chemical-specific limits permit state regulations at LAC 33:IX.2707.D.1.e.

6. MONITORING FREQUENCY REDUCTION

- a. Upon successfully passing the first four consecutive quarters of WET testing after permit issuance/reissuance and in the absence of subsequent lethal toxicity for one or both test species at or below the critical dilution, the permittee may apply for a testing frequency reduction. If granted, the monitoring frequency for that test species may be reduced to not less than once per year for the less sensitive species (usually the Fathead minnow) and not less than once per six months for the more sensitive test species (usually the *Daphnia pulcx*).

## Part II

Page 21 of 21

Permit No. Draft LA0005754

AI No. 1136

## OTHER REQUIREMENTS (continued)

- b. CERTIFICATION - The permittee must certify in writing that no test failures have occurred and that all tests meet all test acceptability criteria in item 3.a. above. In addition, the permittee must provide a list with each test performed including test initiation date, species, NOEC's for lethal effects and the maximum coefficient of variation for the controls. Upon review and acceptance of the information, the agency will issue a letter of confirmation of the monitoring frequency reduction. A copy of the letter will be forwarded to the agency's Permit Compliance Unit to update the permit reporting requirements.
- c. This monitoring frequency reduction applies only until the expiration date of this permit, at which time the Monitoring Frequency/Monitoring Period for both test species reverts back to once per quarter until the permit is re-issued.
- d. SURVIVAL FAILURES - If any test fails the survival endpoint at any time during the term of this permit, three monthly retests are required and the monitoring frequency for the affected test species shall be increased to once per quarter until the permit is reissued. Monthly retesting is not required if the permittee is performing a TRE.

**TABLE 1**  
**SUMMARY SHEET**  
**Daphnia pulex ACUTE SURVIVAL TEST RESULTS**

PERMITTEE: Shell Chemical, LP  
 FACILITY SITE: Geismar Plant  
 NPDES PERMIT NUMBER: LA0005754/AI 1136 WP PERMIT NUMBER:                       
 OUTFALL IDENTIFICATION: 001  
 OUTFALL SAMPLE IS FROM                      SINGLE                      MULTIPLE DISCHARGE  
 BIOMONITORING LABORATORY:                       
 DILUTION WATER USED:                      RECEIVING WATER                      LAB WATER  
 CRITICAL DILUTION: 4.2 % DATE TEST INITIATED:                     

1. LOW-FLOW LETHALITY:

Is the mean survival at 48 hours significantly less ( $p=0.05$ ) than the control survival for the low flow or critical dilution?

           YES            NO

**DILUTION SERIES RESULTS**

TIME OF READING	REP	0%	1.8%	2.4%	3.2%	4.2%	5.6%
24-HOUR							
48-HOUR							
MEAN							

2. Are the test results to be considered valid?           yes           no  
 If X no (test invalid), what reasons for invalidity?

3. Is this a retest of a previous invalid test?           yes           no  
 Is this a retest of a previous test failure?           yes           no

4. Enter percent effluent corresponding to each NOEC (No Observed Effect Concentration) for Daphnia pulex:

NOEC            % EFFLUENT

LC<sub>50</sub>48            % EFFLUENT

**TABLE 2  
SUMMARY SHEET  
Pimephales promelas ("fathead minnow") ACUTE SURVIVAL TEST**

PERMITTEE: Shell Chemical, LP  
 FACILITY SITE: Geismar Plant  
 NPDES PERMIT NUMBER: LA0005754/AI 1136 WP PERMIT NUMBER: \_\_\_\_\_  
 OUTFALL IDENTIFICATION: 001  
 OUTFALL SAMPLE IS FROM \_\_\_\_\_ SINGLE \_\_\_\_\_ MULTIPLE DISCHARGE  
 BIOMONITORING LABORATORY: \_\_\_\_\_  
 DILUTION WATER USED: \_\_\_\_\_ RECEIVING WATER: \_\_\_\_\_ LAB WATER  
 CRITICAL DILUTION: 4.2 % DATE TEST INITIATED: \_\_\_\_\_

1. LOW-FLOW LETHALITY:

Is the mean survival at 48 hours significantly less ( $p=0.05$ ) than the control survival for the low flow or critical dilution?

\_\_\_\_\_ YES \_\_\_\_\_ NO

**DILUTION SERIES RESULTS**

TIME OF READING	REP	0%	1.8%	2.4%	3.2%	4.2%	5.6%
24-HOUR							
48-HOUR							
MEAN							

2. Are the test results to be considered valid? \_\_\_\_\_ yes \_\_\_\_\_ no  
 If X no (test invalid), what reasons for invalidity?

3. Is this a retest of a previous invalid test? \_\_\_\_\_ yes \_\_\_\_\_ no  
 Is this a retest of a previous test failure? \_\_\_\_\_ yes \_\_\_\_\_ no

4. Enter percent effluent corresponding to each NOEC (No Observed Effect Concentration) for Pimephales promelas:

NOEC \_\_\_\_\_ % EFFLUENT

LC<sub>50</sub>48 \_\_\_\_\_ % EFFLUENT

PART III  
STANDARD CONDITIONS FOR LPDES PERMITS

SECTION A. GENERAL CONDITIONS

1. Introduction

In accordance with the provisions of LAC 33:IX.2701, et seq., this permit incorporates either expressly or by reference ALL conditions and requirements applicable to Louisiana Pollutant Discharge Elimination System Permits (LPDES) set forth in the Louisiana Environmental Quality Act (LEQA), as amended, as well as ALL applicable regulations.

2. Duty to Comply

The permittee must comply with all conditions of this permit. Any permit noncompliance constitutes a violation of the Clean Water Act (CWA) and the Louisiana Environmental Quality Act and is grounds for enforcement action; for permit termination, revocation and reissuance, or modification; or for denial of a permit renewal application.

3. Penalties for Violation of Permit Conditions

- a. LA. R. S. 30:2025 provides for civil penalties for violations of these regulations and the Louisiana Environmental Quality Act. LA. R. S. 30:2076.2 provides for criminal penalties for violation of any provisions of the LPDES or any order or any permit condition or limitation issued under or implementing any provisions of the LPDES program. (See Section E. Penalties for Violation of Permit Conditions for additional details).
- b. Any person may be assessed an administrative penalty by the State Administrative Authority under LA. R. S. 30:2025 for violating a permit condition or limitation implementing any of the requirements of the LPDES program in a permit issued under the regulations or the Louisiana Environmental Quality Act.

4. Toxic Pollutants

- a. Other effluent limitations and standards under Sections 301, 302, 303, 307, 318, and 405 of the Clean Water Act. If any applicable toxic effluent standard or prohibition (including any schedule of compliance specified in such effluent standard or prohibition) is promulgated under Section 307(a) of the Clean Water Act for a toxic pollutant and that standard or prohibition is more stringent than any limitation on the pollutant in this permit, the state administrative authority shall institute proceedings under these regulations to modify or revoke and reissue the permit to conform to the toxic effluent standard or prohibition.
- b. The permittee shall comply with effluent standards or prohibitions established under Section 307(a) of the Clean Water Act for toxic pollutants and with standards for sewage sludge use or disposal established under Section 405(d) of the Clean Water Act within the time provided in the regulations that establish these standards or prohibitions, or standards for sewage sludge use or disposal, even if the permit has not yet been modified to incorporate the requirement.

5. Duty to Reapply

- a. Individual Permits. If the permittee wishes to continue an activity regulated by this permit after the expiration date of this permit, the permittee must apply for and obtain a new permit. The new application shall be submitted at least 180 days before the expiration date of the existing permit, unless permission for a later date has been granted by the state administrative authority. (The state administrative authority shall not grant permission for applications to be submitted later than the expiration date of the existing permit.) Continuation of expiring permits shall be governed by regulations promulgated at LAC 33:IX.2321 and any subsequent amendments.



- b. General Permits. General permits expire five years after the effective date. The 180-day reapplication period as defined above is not applicable to general permit authorizations. Reissued general permits may provide automatic coverage for permittees authorized under the previous version of the permit, and no new application is required. Requirements for obtaining authorization under the reissued general permit will be outlined in Part I of the new permit. Permittees authorized to discharge under an expiring general permit should follow the requirements for obtaining coverage under the new general permit to maintain discharge authorization.

#### 6. Permit Action

This permit may be modified, revoked and reissued, or terminated for cause in accordance with LAC 33:IX.2903, 2905, 2907, 3105 and 6509. The causes may include, but are not limited to, the following:

- a. Noncompliance by the permittee with any condition of the permit;
- b. The permittee's failure in the application or during the permit issuance process to disclose fully all relevant facts, or the permittee's misrepresentation of any relevant facts at any time;
- c. A determination that the permitted activity endangers human health or the environment and can only be regulated to acceptable levels by permit modification or termination;
- d. A change in any condition that requires either a temporary or a permanent reduction or elimination of any discharge; or
- e. Failure to pay applicable fees under the provisions of LAC 33: IX. Chapter 13;
- f. Change of ownership or operational control;

The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or a notification of planned changes or anticipated noncompliance does not stay any permit condition.

#### 7. Property Rights

This permit does not convey any property rights of any sort, or any exclusive privilege.

#### 8. Duty to Provide Information

The permittee shall furnish to the state administrative authority, within a reasonable time, any information which the state administrative authority may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit, or to determine compliance with this permit. The permittee shall also furnish to the state administrative authority, upon request, copies of records required to be kept by this permit.

#### 9. Criminal and Civil Liability

Except as provided in permit conditions on "Bypassing" and "Upsets", nothing in this permit shall be construed to relieve the permittee from civil or criminal penalties for noncompliance. Any false or materially misleading representation or concealment of information required to be reported by the provisions of the permit, the Act, or applicable regulations, which avoids or effectively defeats the regulatory purpose of the Permit may subject the Permittee to criminal enforcement pursuant to La. R.S. 30:2025.

#### 10. Oil and Hazardous Substance Liability

Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the permittee from any responsibilities, liabilities, or penalties to which the permittee is or may be subject under Section 311 of the Clean Water Act.

#### 11. State Laws

Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the permittee from any responsibilities, liabilities, or penalties established pursuant to any applicable State law or regulation under authority preserved by Section 510 of the Clean Water Act.

REVISED 4/25/07

Page 3 of 17

12. Severability

If any provision of these rules and regulations, or the application thereof, is held to be invalid, the remaining provisions of these rules and regulations shall not be affected, so long as they can be given effect without the invalid provision. To this end, the provisions of these rules and regulations are declared to be severable.

13. Dilution

A permittee shall not achieve any effluent concentration by dilution unless specifically authorized in the permit. A permittee shall not increase the use of process water or cooling water or otherwise attempt to dilute a discharge as a partial or complete substitute for adequate treatment to achieve permit limitations or water quality.

14. Facilities Requiring Approval from Other State Agencies

In accordance with La R.S.40.4(A)(6) the plans and specifications of all sanitary sewerage treatment systems, both public and private, must be approved by the Department of Health and Hospitals state health officer or his designee. It is unlawful for any person, firm, or corporation, both municipal and private to operate a sanitary sewage treatment facility without proper authorization from the state health officer.

In accordance with La R.S.40.1149, it is unlawful for any person, firm or corporation, both municipal and private, operating a sewerage system to operate that system unless the competency of the operator is duly certified by the Department of Health and Hospitals state health officer. Furthermore, it is unlawful for any person to perform the duties of an operator without being duly certified.

In accordance with La R.S.48.385, it is unlawful for any industrial wastes, sewage, septic tanks effluent, or any noxious or harmful matter, solid, liquid or gaseous to be discharged into the side or cross ditches or placed upon the rights-of-ways of state highways without the prior written consent of the Department of Transportation and Development chief engineer or his duly authorized representative and of the secretary of the Department of Health and Hospitals.

SECTION B. PROPER OPERATION AND MAINTENANCE

1. Need to Halt or Reduce not a Defense

It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.

2. Duty to Mitigate

The permittee shall take all reasonable steps to minimize or prevent any discharge in violation of this permit which has a reasonable likelihood of adversely affecting human health or the environment. The permittee shall also take all reasonable steps to minimize or correct any adverse impact on the environment resulting from noncompliance with the permit, including such accelerated or additional monitoring as necessary to determine the nature and impact of the noncomplying discharge.

3. Proper Operation and Maintenance

a. The permittee shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by the permittee to achieve compliance with the conditions of this permit. Proper operation and maintenance also includes adequate laboratory controls and appropriate quality assurance procedures. This provision requires the operation of back-up or auxiliary facilities or similar systems which are installed by a permittee only when the operation is necessary to achieve compliance with the conditions of the permit.

b. The permittee shall provide an adequate operating staff which is duly qualified to carry out operation, maintenance and other functions necessary to ensure compliance with the conditions of this permit.

REVISED 4/25/07

Page 4 of 17

4. Bypass of Treatment Facilities

- a. Bypass. The intentional diversion of waste streams from any portion of a treatment facility.
- b. Bypass not exceeding limitations. The permittee may allow any bypass to occur which does not cause effluent limitations to be exceeded, but only if it also is for essential maintenance to assure efficient operation. These bypasses are not subject to the provisions of Section B.4.c. and 4.d of these standard conditions.
- c. Notice
  - (1) Anticipated bypass. If the permittee knows in advance of the need for a bypass, it shall submit prior notice to the Office of Environmental Services, Water Permits Division, if possible at least ten days before the date of the bypass.
  - (2) Unanticipated bypass. The permittee shall submit notice of an unanticipated bypass as required in LAC 33:IX.2701.L.6, (24-hour notice) and Section D.6.e. of these standard conditions.
- d. Prohibition of bypass
  - (1) Bypass is prohibited, and the state administrative authority may take enforcement action against a permittee for bypass, unless:
    - (a) Bypass was unavoidable to prevent loss of life, personal injury, or severe property damage;
    - (b) There were no feasible alternatives to the bypass, such as the use of auxiliary treatment facilities, retention of untreated wastes, or maintenance during normal periods of equipment downtime. This condition is not satisfied if adequate back-up equipment should have been installed in the exercise of reasonable engineering judgment to prevent a bypass which occurred during normal periods of equipment downtime or preventive maintenance; and,
    - (c) The permittee submitted notices as required by Section B.4.c of these standard conditions.
  - (2) The state administrative authority may approve an anticipated bypass after considering its adverse effects, if the state administrative authority determines that it will meet the three conditions listed in Section B.4.d(1) of these standard conditions.

5. Upset Conditions

- a. Upset. An exceptional incident in which there is unintentional and temporary noncompliance with technology based permit effluent limitations because of factors beyond the reasonable control of the permittee. An upset does not include noncompliance to the extent caused by operational error, improperly designed treatment facilities, inadequate treatment facilities, lack of preventive maintenance, or careless or improper operation.
- b. Effect of an upset. An upset constitutes an affirmative defense to an action brought for noncompliance with such technology-based permit effluent limitations if the requirements of Section B.5.c. are met. No determination made during administrative review of claims that noncompliance was caused by upset, and before an action for noncompliance, is final administrative action subject to judicial review.
- c. Conditions necessary for a demonstration of upset. A permittee who wishes to establish the affirmative defense of upset shall demonstrate, through properly signed, contemporaneous operating logs, or other relevant evidence that:
  - (1) An upset occurred and that the permittee can identify the cause(s) of the upset;
  - (2) The permitted facility was at the time being properly operated; and
  - (3) The permittee submitted notice of the upset as required by LAC 33:IX.2701.L.6.b.ii. and Section D.6.e.(2) of these standard conditions; and

REVISED 4/25/07

Page 5 of 17

(4) The permittee complied with any remedial measures required by Section B.2 of these standard conditions.

d. Burden of proof. In any enforcement proceeding, the permittee seeking to establish the occurrence of an upset has the burden of proof.

6. Removed Substances

Solids, sewage sludges, filter backwash, or other pollutants removed in the course of treatment or wastewater control shall be properly disposed of in a manner such as to prevent any pollutant from such materials from entering waters of the state and in accordance with environmental regulations.

7. Percent Removal

For publicly owned treatment works, the 30-day average percent removal for Biochemical Oxygen Demand and Total Suspended Solids shall not be less than 85 percent in accordance with LAC 33:IX.5905.A.3. and B.3.

## SECTION C. MONITORING AND RECORDS

1. Inspection and Entry

The permittee shall allow the state administrative authority or an authorized representative (including an authorized contractor acting as a representative of the Administrator), upon the presentation of credentials and other documents as may be required by the law to:

a. Enter upon the permittee's premises where a regulated facility or activity is located or conducted, or where records must be kept under the conditions of this permit.

Enter upon the permittee's premises where a discharge source is or might be located or in which monitoring equipment or records required by a permit are kept for inspection or sampling purposes. Most inspections will be unannounced and should be allowed to begin immediately, but in no case shall begin more than thirty (30) minutes after the time the inspector presents his/her credentials and announces the purpose(s) of the inspection. Delay in excess of thirty (30) minutes shall constitute a violation of this permit. However, additional time can be granted if the inspector or the Administrative Authority determines that the circumstances warrant such action; and

b. Have access to and copy, at reasonable times, any records that the department or its authorized representative determines are necessary for the enforcement of this permit. For records maintained in either a central or private office that is open only during normal office hours and is closed at the time of inspection, the records shall be made available as soon as the office is open, but in no case later than the close of business the next working day;

c. Inspect at reasonable times any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this permit; and

d. Sample or monitor at reasonable times, for the purposes of assuring permit compliance or as otherwise authorized by the Clean Water Act or the Louisiana Environmental Quality Act, any substances or parameters at any location.

e. Sample Collection

(1) When the inspector announces that samples will be collected, the permittee will be given an additional thirty (30) minutes to prepare containers in order to collect duplicates. If the permittee cannot obtain and prepare sample containers within this time, he is considered to have waived his right to collect duplicate samples and the sampling will proceed immediately. Further delay on the part of the permittee in allowing initiation of the sampling will constitute a violation of this permit.

(2) At the discretion of the administrative authority, sample collection shall proceed immediately (without the additional 30 minutes described in Section C.1.a. above) and the inspector shall supply the permittee with a duplicate sample.

- f. It shall be the responsibility of the permittee to ensure that a facility representative familiar with provisions of its wastewater discharge permit, including any other conditions or limitations, be available either by phone or in person at the facility during all hours of operation. The absence of such personnel on-site who are familiar with the permit shall not be grounds for delaying the initiation of an inspection except in situations as described in Section C.1.b. of these standard conditions. The permittee shall be responsible for providing witnesses/escorts during inspections. Inspectors shall abide by all company safety rules and shall be equipped with standard safety equipment (hard hat, safety shoes, safety glasses) normally required by industrial facilities.
- g. Upon written request copies of field notes, drawings, etc., taken by department personnel during an inspection shall be provided to the permittee after the final inspection report has been completed.

2. Representative Sampling

Samples and measurements taken for the purpose of monitoring shall be representative of the monitored activity. All samples shall be taken at the outfall location(s) indicated in the permit. The state administrative authority shall be notified prior to any changes in the outfall location(s). Any changes in the outfall location(s) may be subject to modification, revocation and reissuance in accordance with LAC 33:IX.2903.

3. Retention of Records

Except for records of monitoring information required by this permit related to the permittee's sewage sludge use and disposal activities, which shall be retained for a period of at least five years (or longer as required by 40 CFR 503), the permittee shall retain records of all monitoring information, including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation, copies of all reports required by this permit, and records of all data used to complete the application for this permit, for a period of at least 3 years from the date of the sample, measurement, report, or application. This period may be extended by request of the state administrative authority at any time.

4. Record Contents

Records of monitoring information shall include:

- a. The date, exact place, and time of sampling or measurements;
- b. The individual(s) who performed the sampling or measurements;
- c. The date(s) analyses were performed;
- d. The time(s) analyses were begun;
- e. The individual(s) who performed the analyses;
- f. The analytical techniques or methods used;
- g. The results of such analyses; and
- h. The results of all quality control procedures.

5. Monitoring Procedures

- a. Monitoring results must be conducted according to test procedures approved under 40 CFR Part 136 or, in the case of sludge use or disposal, approved under 40 CFR Part 136 unless otherwise specified in 40 CFR Part 503, unless other test procedures have been specified in this permit.
- b. The permittee shall calibrate and perform maintenance procedures on all monitoring and analytical instruments at intervals frequent enough to insure accuracy of measurements and shall maintain appropriate records of such activities.
- c. The permittee or designated laboratory shall have an adequate analytical quality assurance/quality control program to produce defensible data of known precision and accuracy. All quality control measures shall be assessed and evaluated on an on-going basis and quality control acceptance criteria shall be used to determine the validity of the data. All method specific quality control as prescribed in the method shall be followed. If quality control requirements are not included in the method, the permittee or designated laboratory shall follow the quality control requirements as prescribed in the Approved Edition (40 CFR Part 136) Standard Methods for the Examination of Water and Wastes, Sections 1020A and 1020B. General sampling protocol shall follow guidelines established in the

"Handbook for Sampling and Sample Preservation of Water and Wastewater, 1982 "U.S. Environmental Protection Agency. This publication is available from the National Technical Information Service (NTIS), Springfield, VA 22161, Phone number (800) 553-6847. Order by NTIS publication number PB-83-124503.

6. Flow Measurements

Appropriate flow measurement devices and methods consistent with accepted scientific practices shall be selected and used to ensure the accuracy and reliability of measurements of the volume of monitored discharges. The devices shall be installed, calibrated, and maintained to insure that the accuracy of the measurements are consistent with the accepted capability of that type of device. Devices selected shall be capable of measuring flows with a maximum deviation of less than 10% from true discharge rates throughout the range of expected discharge volumes. Guidance in selection, installation, calibration and operation of acceptable flow measurement devices can be obtained from the following references:

- a. "A Guide to Methods and Standards for the Measurement of Water Flow, 1975," U.S. Department of Commerce, National Bureau of Standards. This publication is available from the National Technical Information Service (NTIS), Springfield, VA 22161, Phone number (800) 553-6847. Order by NTIS publication number COM-75-10683.
- b. "Flow Measurement in Open Channels and Closed Conduits, Volumes 1 and 2," U.S. Department of Commerce, National Bureau of Standards. This publication is available from the National Technical Service (NTIS), Springfield, VA, 22161, Phone number (800) 553-6847. Order by NTIS publication number PB-273 535.
- c. "NPDES Compliance Flow Measurement Manual," U.S. Environmental Protection Agency, Office of Water Enforcement. This publication is available from the National Technical Information Service (NTIS), Springfield, VA 22161, Phone number (800) 553-6847. Order by NTIS publication number PB-82-131178.

7. Prohibition for Tampering: Penalties

- a. LA R.S. 30:2025 provides for punishment of any person who falsifies, tampers with, or knowingly renders inaccurate any monitoring device or method required to be maintained under this permit.
- b. LA R.S. 30:2076.2 provides for penalties for any person who knowingly makes any false statement, representation, or certification in any record or other document submitted or required to be maintained under this permit, including monitoring reports or reports of compliance or non compliance.

8. Additional Monitoring by the Permittee

If the Permittee monitors any pollutant more frequently than required by the permit using test procedures approved under 40 CFR Part 136 (See LAC 33:IX.4901) or, in the case of sludge use and disposal, approved under 40 CFR Part 136 (See LAC 33:IX.4901) unless otherwise specified in 40 CFR Part 503, or as specified in the permit, the results of this monitoring shall be included in the calculation and reporting of the data submitted in the DMR or sludge reporting form specified by the state administrative authority.

9. Averaging of Measurements

Calculations for all limitations which require averaging of measurements shall utilize an arithmetic mean unless otherwise specified by the state administrative authority in the permit.

10. Laboratory Accreditation

- a. LAC 33:I.Subpart 3, Chapters 45-59 provide requirements for an accreditation program specifically applicable to commercial laboratories, wherever located, that provide chemical analyses, analytical results, or other test data to the department, by contract or by agreement, and the data is:
  - (1) Submitted on behalf of any facility, as defined in R.S.30:2004;
  - (2) Required as part of any permit application;
  - (3) Required by order of the department;
  - (4) Required to be included on any monitoring reports submitted to the department;
  - (5) Required to be submitted by contractor
  - (6) Otherwise required by department regulations.

- b. The department laboratory accreditation program, Louisiana Environmental Laboratory Accreditation Program (LELAP) is designed to ensure the accuracy, precision, and reliability of the data generated, as well as the use of department-approved methodologies in generation of that data. Laboratory data generated by commercial environmental laboratories that are not (LELAP) accredited will not be accepted by the department. Retesting of analysis will be required by an accredited commercial laboratory.

Where retesting of effluent is not possible (i.e. data reported on DMRs for prior month's sampling), the data generated will be considered invalid and in violation of the LPDES permit.

- c. Regulations on the Louisiana Environmental Laboratory Accreditation Program and a list of labs that have applied for accreditation are available on the department website located under DIVISIONS → LABORATORY SERVICES at the following link:

<http://www.deq.louisiana.gov>

Questions concerning the program may be directed to (225) 219-9800.

#### SECTION D. REPORTING REQUIREMENTS

##### 1. Facility Changes

The permittee shall give notice to the state administrative authority as soon as possible of any planned physical alterations or additions to the permitted facility. Notice is required only when:

- a. The alteration or addition to a permitted facility may meet one of the criteria for determining whether a facility is a new source in 40 CFR 122.29(b); or
- b. The alteration or addition could significantly change the nature or increase the quantity of pollutants discharged. This notification applies to pollutants which are subject neither to effluent limitations in the permit, nor to notification requirements under LAC 33:IX.2703.A.1.
- c. For Municipal Permits. Any new introduction of pollutants into the POTW from an indirect discharger which would be subject to Section 301, or 306 of the CWA if it were directly discharging those pollutants; and any substantial change in the volume or character of pollutants being introduced into that POTW by a source introducing pollutants into the POTW at the time of issuance of the permit. In no case are any new connections, increased flows, or significant changes in influent quality permitted that will cause violation of the effluent limitations specified herein.

##### 2. Anticipated Noncompliance

The permittee shall give advance notice to the state administrative authority of any planned changes in the permitted facility or activity which may result in noncompliance with permit requirements.

##### 3. Transfers

This permit is not transferable to any person except after notice to the state administrative authority. The state administrative authority may require modification or revocation and reissuance of the permit to change the name of the permittee and incorporate such other requirements as may be necessary under the Clean Water Act or the Louisiana Environmental Quality Act. (See LAC 33:IX.2901; in some cases, modification or revocation and reissuance is mandatory.)

A permit may be transferred by the permittee to a new owner or operator only if the permit has been modified or revoked and reissued (under LAC 33:IX.2903. A.2.b), or a minor modification made (under LAC 33:IX.2905) to identify the new permittee and incorporate such other requirements as may be necessary under the Clean Water Act and the Louisiana Environmental Quality Act.

#### 4. Monitoring Reports

Monitoring results shall be reported at the intervals and in the form specified in Part I or Part II of this permit.

The permittee shall submit properly completed Discharge Monitoring Reports (DMRs) on the form specified in the permit. Preprinted DMRs are provided to majors/92-500's and other designated facilities. Please contact the Permit Compliance Unit concerning preprints. Self-generated DMRs must be pre-approved by the Permit Compliance Unit prior to submittal. Self-generated DMRs are approved on an individual basis. Requests for approval of self-generated DMRs should be submitted to:

Supervisor, Permit Compliance Unit  
Office of Environmental Compliance  
Post Office Box 4312  
Baton Rouge, LA 70821-4312

Copies of blank DMR templates, plus instructions for completing them, and EPA's LPDES Reporting Handbook are available at the department website located at:

<http://www.deq.louisiana.gov/portal/Default.aspx?tabid=2276>

#### 5. Compliance Schedules

Reports of compliance or noncompliance with, or any progress reports on, interim and final requirements contained in any compliance schedule of this permit shall be submitted no later than 14 days following each schedule date.

#### 6. Requirements for Notification

##### a. Emergency Notification

As required by LAC 33:I.3915, in the event of an unauthorized discharge that does cause an emergency condition, the discharger shall notify the hotline (DPS 24-hour Louisiana Emergency Hazardous Materials Hotline) by telephone at (225) 925-6595 (collect calls accepted 24 hours a day) immediately (a reasonable period of time after taking prompt measures to determine the nature, quantity, and potential off-site impact of a release, considering the exigency of the circumstances), but in no case later than one hour after learning of the discharge. (An emergency condition is any condition which could reasonably be expected to endanger the health and safety of the public, cause significant adverse impact to the land, water, or air environment, or cause severe damage to property.) Notification required by this section will be made regardless of the amount of discharge. Prompt Notification Procedures are listed in Section D.6.c. of these standard conditions.

A written report shall be provided within seven calendar days after the notification. The report shall contain the information listed in Section D.6.d. of these standard conditions and any additional information in LAC 33:I.3925.B.

##### b. Prompt Notification

As required by LAC 33:I.3917, in the event of an unauthorized discharge that exceeds a reportable quantity specified in LAC 33:I.Subchapter E, but does not cause an emergency condition, the discharger shall promptly notify the department within 24 hours after learning of the discharge. Notification should be made to the Office of Environmental Compliance, Surveillance Division Single Point of Contact (SPOC) in accordance with LAC 33:I.3923.

In accordance with LAC 33:I.3923, prompt notification shall be provided within a time frame not to exceed 24 hours and shall be given to the Office of Environmental Compliance, Surveillance Division Single Point of Contact (SPOC) as follows:

- (1) by the Online Incident Reporting screens found at  
<http://www3.deq.louisiana.gov/surveillance/irf/forms/> ;or



- (2) by e-mail utilizing the Incident Report Form and instructions found at <http://www.deq.louisiana.gov/portal/Default.aspx?tabid=279>; or
  - (3) by telephone at (225) 219-3640 during office hours, or (225) 342-1234 after hours and on weekends and holidays.
- c. Content of Prompt Notifications. The following guidelines will be utilized as appropriate, based on the conditions and circumstances surrounding any unauthorized discharge, to provide relevant information regarding the nature of the discharge:
- (1) the name of the person making the notification and the telephone number where any return calls from response agencies can be placed;
  - (2) the name and location of the facility or site where the unauthorized discharge is imminent or has occurred, using common landmarks. In the event of an incident involving transport, include the name and address of the transporter and generator;
  - (3) the date and time the incident began and ended, or the estimated time of continuation if the discharge is continuing;
  - (4) the extent of any injuries and identification of any known personnel hazards that response agencies may face;
  - (5) the common or scientific chemical name, the U.S. Department of Transportation hazard classification, and the best estimate of amounts of any and all discharged pollutants;
  - (6) a brief description of the incident sufficient to allow response agencies to formulate their level and extent of response activity.
- d. Written Notification Procedures. Written reports for any unauthorized discharge that requires notification under Section D.6.a. or 6.b., or shall be submitted by the discharger to the Office of Environmental Compliance, Surveillance Division SPOC in accordance with LAC 33:IX.3925 within seven calendar days after the notification required by D.6.a. or 6.b., unless otherwise provided for in a valid permit or other department regulation. Written notification reports shall include, but not be limited to, the following information:
- (1) the name, address, telephone number, Agency Interest (AI) number (number assigned by the department) if applicable, and any other applicable identification numbers of the person, company, or other party who is filing the written report, and specific identification that the report is the written follow-up report required by this section;
  - (2) the time and date of prompt notification, the state official contacted when reporting, the name of person making that notification, and identification of the site or facility, vessel, transport vehicle, or storage area from which the unauthorized discharge occurred;
  - (3) date(s), time(s), and duration of the unauthorized discharge and, if not corrected, the anticipated time it is expected to continue;
  - (4) details of the circumstances (unauthorized discharge description and root cause) and events leading to any unauthorized discharge, including incidents of loss of sources of radiation, and if the release point is subject to a permit:
    - (a) the current permitted limit for the pollutant(s) released; and
    - (b) the permitted release point/outfall ID.
  - (5) the common or scientific chemical name of each specific pollutant that was released as the result of an unauthorized discharge, including the CAS number and U.S. Department of Transportation hazard classification, and the best estimate of amounts of any and all released pollutants (total amount of each compound expressed in pounds, including calculations);

- (6) a statement of the actual or probable fate or disposition of the pollutant or source of radiation and what off-site impact resulted;
- (7) remedial actions taken, or to be taken, to stop unauthorized discharges or to recover pollutants or sources of radiation.
- (8) Written notification reports shall be submitted to the Office of Environmental Compliance, Surveillance Division SPOC by mail or fax. The transmittal envelope and report or fax cover page and report should be clearly marked "**UNAUTHORIZED DISCHARGE NOTIFICATION REPORT**."

Please see LAC 33:I.3925.B for additional written notification procedures.

- e. Twenty-four Hour Reporting. The permittee shall report any noncompliance which may endanger human health or the environment. Any information shall be provided orally within 24 hours from the time the permittee becomes aware of the circumstances. A written submission shall also be provided within five days of the time the permittee becomes aware of the circumstances. The written submission shall contain a description of the noncompliance and its cause; the period of noncompliance, including exact dates and times, and if the noncompliance has not been corrected, the anticipated time it is expected to continue; and; steps taken or planned to reduce, eliminate, and prevent recurrence of the noncompliance. The following shall be included as information which must be reported within 24 hours:

- (1) Any unanticipated bypass which exceeds any effluent limitation in the permit (see LAC 33:IX.2701.M.3.b.);
- (2) Any upset which exceeds any effluent limitation in the permit;
- (3) Violation of a maximum daily discharge limitation for any of the pollutants listed by the state administrative authority in Part II of the permit to be reported within 24 hours (LAC 33:IX.2707.G.).

7. Other Noncompliance

The permittee shall report all instances of noncompliance not reported under Section D.4., 5., and 6., at the time monitoring reports are submitted. The reports shall contain the information listed in Section D.6.e.

8. Other Information

Where the permittee becomes aware that it failed to submit any relevant facts in a permit application, or submitted incorrect information in a permit application or in any report to the state administrative authority, it shall promptly submit such facts or information.

9. Discharges of Toxic Substances

In addition to the reporting requirements under Section D.1-8, all existing manufacturing, commercial, mining, and silvicultural dischargers must notify the Office of Environmental Services, Water Permits Division as soon as they know or have reason to believe:

- a. That any activity has occurred or will occur which would result in the discharge, on a routine or frequent basis, of any toxic pollutant:
  - i. listed at LAC 33:IX.7107, Tables II and III (excluding Total Phenols) which is not limited in the permit, if that discharge will exceed the highest of the following notification levels:
    - (1) One hundred micrograms per liter (100 µg/L);
    - (2) Two hundred micrograms per liter (200 µg/L) for acrolein and acrylonitrile; five hundred micrograms per liter (500 µg/L) for 2,4 -dinitro-phenol and for 2-methyl-4,6-dinitrophenol; and one milligram per liter (1 mg/L) for antimony;
    - (3) Five (5) times the maximum concentration value reported for that pollutant in the permit application in accordance with LAC33:IX.2501.G.7; or
    - (4) The level established by the state administrative authority in accordance with LAC 33:IX.2707.F; or
  - ii. which exceeds the reportable quantity levels for pollutants at LAC 33:I. Subchapter E.

REVISED 4/25/07

Page 12 of 17

- b. That any activity has occurred or will occur which would result in any discharge, on a non-routine or infrequent basis, of a toxic pollutant:
  - i. listed at LAC 33:IX.7107, Tables II and III (excluding Total Phenols) which is not limited in the permit, if that discharge will exceed the highest of the following "notification levels":
    - (1) Five hundred micrograms per liter (500 µg/L);
    - (2) One milligram per liter (1 mg/L) for antimony;
    - (3) Ten (10) times the maximum concentration value reported for that pollutant in the permit application in accordance with LAC 33:IX.2501.G.7; or
    - (4) The level established by the state administrative authority in accordance with LAC 33:IX.2707.F; or
  - ii. which exceeds the reportable quantity levels for pollutants at LAC 33:I. Subchapter E.

#### 10. Signatory Requirements

All applications, reports, or information submitted to the state administrative authority shall be signed and certified.

- a. All permit applications shall be signed as follows:

- (1) For a corporation - by a responsible corporate officer. For the purpose of this section, a responsible corporate officer means:
  - (a) A president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy or decision making functions for the corporation; or,
  - (b) The manager of one or more manufacturing, production, or operating facilities, provided: the manager is authorized to make management decisions that govern the operation of the regulated facility, including having the explicit or implicit duty of making major capital investment recommendations and initiating and directing other comprehensive measures to ensure long term environmental compliance with environmental laws and regulations; the manager can ensure that the necessary systems are established or actions taken to gather complete and accurate information for permit application requirements; and the authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures.

**NOTE:** DEQ does not require specific assignments or delegations of authority to responsible corporate officers identified in Section D.10.a.(1)(a). The agency will presume that these responsible corporate officers have the requisite authority to sign permit applications unless the corporation has notified the state administrative authority to the contrary. Corporate procedures governing authority to sign permit applications may provide for assignment or delegation to applicable corporate positions under Section D.10.a.(1)(b) rather than to specific individuals.

- (2) For a partnership or sole proprietorship - by a general partner or the proprietor, respectively; or
- (3) For a municipality, state, federal, or other public agency - by either a principal executive officer or ranking elected official. For purposes of this section, a principal executive officer of a federal agency includes:
  - (a) The chief executive officer of the agency, or
  - (b) A senior executive officer having responsibility for the overall operations of a principal geographic unit of the agency (e.g., Regional Administrators of EPA).

- b. All reports required by permits and other information requested by the state administrative authority shall be signed by a person described in Section D.10.a., or by a duly authorized representative of that person. A person is a duly authorized representative only if:
  - (1) The authorization is made in writing by a person described in Section D.10.a. of these standard conditions;

- (2) The authorization specifies either an individual or a position having responsibility for the overall operation of the regulated facility or activity such as the position of plant manager, operator of a well or a well field, superintendent, position of equivalent responsibility, or an individual or position having overall responsibility for environmental matters for the company, (a duly authorized representative may thus be either a named individual or an individual occupying a named position; and,
  - (3) The written authorization is submitted to the state administrative authority.
- c. Changes to authorization. If an authorization under Section D.10.b. is no longer accurate because a different individual or position has responsibility for the overall operation of the facility, a new authorization satisfying the requirements of Section D.10.b. must be submitted to the state administrative authority prior to or together with any reports, information, or applications to be signed by an authorized representative.
- d. Certification. Any person signing a document under Section D.10. a. or b. above, shall make the following certification:

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

#### 11. Availability of Reports

All recorded information (completed permit application forms, fact sheets, draft permits, or any public document) not classified as confidential information under R.S. 30:2030(A) and 30:2074(D) and designated as such in accordance with these regulations (LAC 33:IX.2323 and LAC 33:IX.6503) shall be made available to the public for inspection and copying during normal working hours in accordance with the Public Records Act, R.S. 44:1 et seq.

Claims of confidentiality for the following will be denied:

- a. The name and address of any permit applicant or permittee;
- b. Permit applications, permits, and effluent data.
- c. Information required by LPDES application forms provided by the state administrative authority under LAC 33:IX.2501 may not be claimed confidential. This includes information submitted on the forms themselves and any attachments used to supply information required by the forms.

### SECTION E. PENALTIES FOR VIOLATIONS OF PERMIT CONDITION

#### 1. Criminal

##### a. Negligent Violations

The Louisiana Revised Statutes LA. R. S. 30:2076.2 provides that any person who negligently violates any provision of the LPDES, or any order issued by the secretary under the LPDES, or any permit condition or limitation implementing any such provision in a permit issued under the LPDES by the secretary, or any requirement imposed in a pretreatment program approved under the LPDES is subject to a fine of not less than \$2,500 nor more than \$25,000 per day of violation, or by imprisonment for not more than 1 year, or both. If a conviction of a person is for a violation committed after a first conviction of such person, he shall be subject to a fine of not more than \$50,000 per day of violation, or imprisonment of not more than two years, or both.

##### b. Knowing Violations

The Louisiana Revised Statutes LA. R. S. 30:2076.2 provides that any person who knowingly violates any provision of the LPDES, or any permit condition or limitation implementing any such provisions in a permit issued under the LPDES, or any requirement imposed in a pretreatment program approved under

the LPDES is subject to a fine of not less than \$5,000 nor more than \$50,000 per day of violation, or imprisonment for not more than 3 years, or both. If a conviction of a person is for a violation committed after a first conviction of such person, he shall be subject to a fine of not more than \$100,000 per day of violation, or imprisonment of not more than six years, or both.

c. Knowing Endangerment

The Louisiana Revised Statutes LA. R. S. 30:2076.2 provides that any person who knowingly violates any provision of the LPDES, or any order issued by the secretary under the LPDES, or any permit condition or limitation implementing any of such provisions in a permit issued under the LPDES by the secretary, and who knows at that time that he thereby places another person in imminent danger of death or serious bodily injury, shall, upon conviction, be subject to a fine of not more than \$250,000, or by imprisonment for not more than 15 years, or both. A person which is an organization shall, upon conviction of violating this Paragraph, be subject to a fine of not more than one million dollars. If a conviction of a person is for a violation committed after a first conviction of such person under this Paragraph, the maximum punishment shall be doubled with respect to both fine and imprisonment.

d. False Statements

The Louisiana Revised Statutes LA. R. S. 30:2076.2 provides that any person who knowingly makes any false material statement, representation, or certification in any application, record, report, plan, or other document filed or required to be maintained under the LPDES or who knowingly falsifies, tampers with, or renders inaccurate, any monitoring device or method required to be maintained under the LPDES, shall, upon conviction, be subject to a fine of not more than \$10,000, or imprisonment for not more than 2 years, or both. If a conviction of a person is for a violation committed after a first conviction of such person under this Subsection, he shall be subject to a fine of not more than \$20,000 per day of violation, or imprisonment of not more than 4 years, or both.

2. Civil Penalties

The Louisiana Revised Statutes LA. R. S. 30:2025 provides that any person found to be in violation of any requirement of this Subtitle may be liable for a civil penalty, to be assessed by the secretary, an assistant secretary, or the court, of not more than the cost to the state of any response action made necessary by such violation which is not voluntarily paid by the violator, and a penalty of not more than \$32,500 for each day of violation. However, when any such violation is done intentionally, willfully, or knowingly, or results in a discharge or disposal which causes irreparable or severe damage to the environment or if the substance discharged is one which endangers human life or health, such person may be liable for an additional penalty of not more than one million dollars.

(PLEASE NOTE: These penalties are listed in their entirety in Subtitle II of Title 30 of the Louisiana Revised Statutes.)

## SECTION F. DEFINITIONS

All definitions contained in Section 502 of the Clean Water Act shall apply to this permit and are incorporated herein by reference. Additional definitions of words or phrases used in this permit are as follows:

1. Clean Water Act (CWA) means the Clean Water Act (formerly referred to as the Federal Water Pollution Control Act or the Federal Water Pollution Control Act Amendments of 1972) Pub.L.92-500, as amended by Pub.L. 95-217, Pub.L. 95-576, Pub.L. 96-483 and Pub.L. 97-117, 33 U.S.C. 1251 et. seq.).
2. Accreditation means the formal recognition by the department of a laboratory's competence wherein specific tests or types of tests can be accurately and successfully performed in compliance with all minimum requirements set forth in the regulations regarding laboratory accreditation.
3. Administrator means the Administrator of the U.S. Environmental Protection Agency, or an authorized representative.

4. Applicable Standards and Limitations means all state, interstate and federal standards and limitations to which a discharge is subject under the Clean Water Act, including, effluent limitations, water quality standards of performance, toxic effluent standards or prohibitions, best management practices, and pretreatment standards under Sections 301, 302, 303, 304, 306, 307, 308 and 403.
5. Applicable water quality standards means all water quality standards to which a discharge is subject under the Clean Water Act.
6. Commercial Laboratory means any laboratory, wherever located, that performs analyses or tests for third parties for a fee or other compensation and provides chemical analyses, analytical results, or other test data to the department. The term commercial laboratory does not include laboratories accredited by the Louisiana Department of Health and Hospitals in accordance with R.S.49:1001 et seq.
7. Daily Discharge means the discharge of a pollutant measured during a calendar day or any 24-hour period that reasonably represents the calendar day for purposes of sampling. For pollutants with limitations expressed in terms of mass, the daily discharge is calculated as the total mass of the pollutant discharged over the sampling day. For pollutants with limitations expressed in other units of measurement, the daily discharge is calculated as the average measurement of the pollutant over the sampling day. Daily discharge determination of concentration made using a composite sample shall be the concentration of the composite sample.
8. Daily Maximum discharge limitation means the highest allowable "daily discharge".
9. Director means the U.S. Environmental Protection Agency Regional Administrator, or the state administrative authority, or an authorized representative.
10. Domestic septage means either liquid or solid material removed from a septic tank, cesspool, portable toilet, Type III marine sanitation device, or similar treatment works that receives only domestic sewage. Domestic septage does not include liquid or solid material removed from a septic tank, cesspool, or similar treatment works that receives either commercial wastewater or industrial wastewater and does not include grease removed from grease trap at a restaurant.
11. Domestic sewage means waste and wastewater from humans, or household operations that is discharged to or otherwise enters a treatment works.
12. Environmental Protection Agency or (EPA) means the U.S. Environmental Protection Agency.
13. Grab sample means an individual sample collected over a period of time not exceeding 15 minutes, unless more time is needed to collect an adequate sample, and is representative of the discharge.
14. Industrial user means a nondomestic discharger, as identified in 40 CFR 403, introducing pollutants to a publicly owned treatment works.
15. LEQA means the Louisiana Environmental Quality Act.
16. Louisiana Pollutant Discharge Elimination System (LPDES) means those portions of the Louisiana Environmental Quality Act and the Louisiana Water Control Law and all regulations promulgated under their authority which are deemed equivalent to the National Pollutant Discharge Elimination System (NPDES) under the Clean Water Act in accordance with Section 402 of the Clean Water Act and all applicable federal regulations.

17. Monthly Average, other than for fecal coliform bacteria, discharge limitations are calculated as the sum of all "daily discharge(s)" measured during a calendar month divided by the number of "daily discharge(s)" measured during that month. When the permit establishes monthly average concentration effluent limitations or conditions, and flow is measured as continuous record or with a totalizer, the monthly average concentration means the arithmetic average (weighted by flow) of all "daily discharge(s)" of concentration determined during the calendar month where C = daily discharge concentration, F = daily flow and n = number of daily samples; monthly average discharge =

$$\frac{C_1F_1 + C_2F_2 + \dots + C_nF_n}{F_1 + F_2 + \dots + F_n}$$

When the permit establishes monthly average concentration effluent limitations or conditions, and the flow is not measured as a continuous record, then the monthly average concentration means the arithmetic average of all "daily discharge(s)" of concentration determined during the calendar month.

The monthly average for fecal coliform bacteria is the geometric mean of the values for all effluent samples collected during a calendar month.

18. National Pollutant Discharge Elimination System (NPDES) means the national program for issuing, modifying, revoking and reissuing, terminating, monitoring and enforcing permits, and imposing and enforcing pretreatment requirements, under Sections 307, 318, 402, and 405 of the Clean Water Act.
19. Severe property damage means substantial physical damage to property, damage to the treatment facilities that causes them to become inoperable, or substantial and permanent loss of natural resources that can reasonably be expected to occur in the absence of a bypass. Severe property damage does not mean economic loss caused by delays in production.
20. Sewage sludge means a solid, semi-solid, or liquid residue generated during the treatment of domestic sewage in a treatment works. Sewage sludge includes, but is not limited to, domestic septage; scum or solids removed in primary, secondary, or advanced wastewater treatment processes; portable toilet pumpings, type III marine sanitation device pumpings (33 CFR part 159); and a material derived from sewage sludge. Sewage sludge does not include ash generated during the firing of sewage sludge in a sewage sludge incinerator or grit and screenings generated during preliminary treatment of domestic sewage in a treatment works.
21. Treatment works means any devices and systems used in the storage, treatment, recycling and reclamation of municipal sewage and industrial wastes of a liquid nature to implement Section 201 of the Clean Water Act, or necessary to recycle or reuse water at the most economical cost over the estimated life of the works, including intercepting sewers, sewage collection systems, pumping, power and other equipment, and their appurtenances, extension, improvement, remodeling, additions, and alterations thereof. (See Part 212 of the Clean Water Act)
22. For fecal coliform bacteria, a sample consists of one effluent grab portion collected during a 24-hour period at peak loads.
23. The term MGD shall mean million gallons per day.
24. The term mg/L shall mean milligrams per liter or parts per million (ppm).
25. The term ug/L shall mean micrograms per liter or parts per billion (ppb).
26. The term ng/L shall mean nanograms per liter or parts per trillion (ppt).

27. Weekly average, other than for fecal coliform bacteria, is the highest allowable arithmetic mean of the daily discharges over a calendar week, calculated as the sum of all "daily discharge(s)" measured during a calendar week divided by the number of "daily discharge(s)" measured during that week. When the permit establishes weekly average concentration effluent limitations or conditions, and flow is measured as continuous record or with a totalizer, the weekly average concentration means the arithmetic average (weighted by flow) of all "daily discharge(s)" of concentration determined during the calendar week where C = daily discharge concentration, F = daily flow and n = number of daily samples; weekly average discharge

$$= \frac{C_1F_1 + C_2F_2 + \dots + C_nF_n}{F_1 + F_2 + \dots + F_n}$$

When the permit establishes weekly average concentration effluent limitations or conditions, and the flow is not measured as a continuous record, then the weekly average concentration means the arithmetic average of all "daily discharge(s)" of concentration determined during the calendar week.

The weekly average for fecal coliform bacteria is the geometric mean of the values for all effluent samples collected during a calendar week.

28. Sanitary Wastewater Term(s):

- a. 3-hour composite sample consists of three effluent portions collected no closer together than one hour (with the first portion collected no earlier than 10:00 a.m.) over the 3-hour period and composited according to flow, or a sample continuously collected in proportion to flow over the 3-hour period.
- b. 6-hour composite sample consists of six effluent portions collected no closer together than one hour (with the first portion collected no earlier than 10:00 a.m.) over the 6-hour period and composited according to flow, or a sample continuously collected in proportion to flow over the 6-hour period.
- c. 12-hour composite sample consists of 12 effluent portions collected no closer together than one hour over the 12-hour period and composited according to flow, or a sample continuously collected in proportion to flow over the 12-hour period. The daily sampling intervals shall include the highest flow periods.
- d. 24-hour composite sample consists of a minimum of 12 effluent portions collected at equal time intervals over the 24-hour period and combined proportional to flow or a sample continuously collected in proportion to flow over the 24-hour period.